

# MASSACHUSETTS PLOUGHMAN



VOL. LVI. - NO. 3

BOSTON, MASS., SATURDAY, OCTOBER 17, 1896.

WHOLE NO. 2861

## MASSACHUSETTS PLOUGHMAN

Official Organ of the N. E. Agricultural Society

LIVUS DARLING,

PROPRIETOR.

ISSUED WEEKLY AT

JOHN HANCOCK BUILDING

178 DEVONSHIRE STREET, BOSTON, MASS.

TERMS:

\$2.00 per annum, in advance. \$2.50 if not paid in advance. Postage free. Single copies 5 cents.

No paper discontinued, except at the option of the proprietor until all arrearages are paid.

All persons sending contributions to THE PLOUGHMAN for use in its columns must sign their name, not necessarily for publication, but as a guarantee of good faith, otherwise they will be assigned to the waste-basket. All matter intended for publication should be written on one side of paper, with ink, and upon but one side.

Correspondence from particular farmers, giving the results of their experience, is solicited. Letters should be signed with the writer's real name, in full, which will be printed or not, as the writer may wish.

THE PLOUGHMAN offers great advantages to advertisers. Its circulation is large and among the most active and intelligent portion of the community.

Rates of Advertising:

12 1-2 cents per line for first insertion.

6 1-4 cents for each subsequent insertion.

### AGRICULTURAL.

DEEP cultivation hastens the maturity of cabbage plants. Mulching tends to increase the size of the heads. The largest heads usually come from large seeds.

Oats and bran mixed make a fine grain ration for the growing calf. If there is any skimmed milk to spare, it will help matters wonderfully, even up to six months of age.

The standard varieties of strawberries recommended by the Maine station are Babach, Crescent, Haverland, Sharpless and Warfield, with Beder Wood or Michels for very early.

The increasing popularity of gluten meal is a remarkable fact. The same may be said of gluten feed. The milk producing farmers buy immense quantities, and use less corn meal than formerly.

MANY Ontario corn growers cut their crop with a hoe. The tool is triangular, with an eighteen-inch handle; the hoe is made seven inches across the back, and four and one-half inches from apex across to where the handle is attached. A blacksmith can make it from a portion of an old cross-cut saw blade. It should be kept very sharp.

SUNFLOWERS are hardly worth raising for fodder in this section. With the same cultivation, corn produces a third more protein and nearly twice the quantity of carbohydrates, as sunflower heads. A few sunflower seeds are excellent to feed to poultry in winter, but the wild birds are likely to steal about half the seed before you get them harvested.

Is order that cattle may fatten profitably, says Professor Wrightson, certain conditions must be observed. In the first place, it is important to choose well-bred animals in which the disposition to lay on fat has been increased by careful breeding. The first prize fat cattle at our great shows are always well bred, and it is mere waste to attempt to fatten ill-bred stock. This is a point of great importance, and should always be observed.

Before Starting a Berry Bog.

Many farmers are thinking of fixing up a cranberry bog, not being alarmed by the low prices of the fruit this year. It is always a good business when the conditions are right. Otherwise it often proves a risky enterprise. Mr. Hersey, the cranberry grower of Hingham, who is well known to our readers, says:

"Never engage in cranberry culture unless you can locate where the conditions are favorable; never purchase the plants from localities where destructive insects have injured them; never set plants that are not prolific bearers and do not produce berries of a thick flesh (of course it requires some care if you are going to select them from your own home bog, or you would have to deal with reliable growers); never half build a bog; and finally, let the business alone unless you care enough about it to make yourself familiar with all of its details, from the selection of the bog to the marketing of the fruit."

### Planning for Berries.

For the strawberry crop matters should be planned out some years in advance. If the plants are set in new ground they will suffer great loss from the white grub. Strawberries do well after corn or potatoes. Thus three years are required, one to prepare the land with a hood crop, another to grow the plants and the third to mature the crop.

But rather than to set no plants next spring, plough grass sod now, let it freeze over winter and work very thoroughly with a dice harrow in the spring. Upon land so prepared, the plants will usually do well.

Winter protection is often neglected, but the practice pays. It keeps the plants safe and the covering materials remain to keep the berries out of the dirt. Meadow hay is as good as anything for the purpose.

### Sewage on the Farm.

SIMPLE BUT EFFECTIVE WAYS FOR DISPOSAL OF WASTE MATTER.

For isolated rural homes, or village homes commanding a certain amount of ground around the house, the liquid sewage from water-closets, the kitchen and chamber slops, may be disposed of by the simple means of subsoil irrigation, first described by Mr. Moule and subsequently elaborated by Colonel Waring.

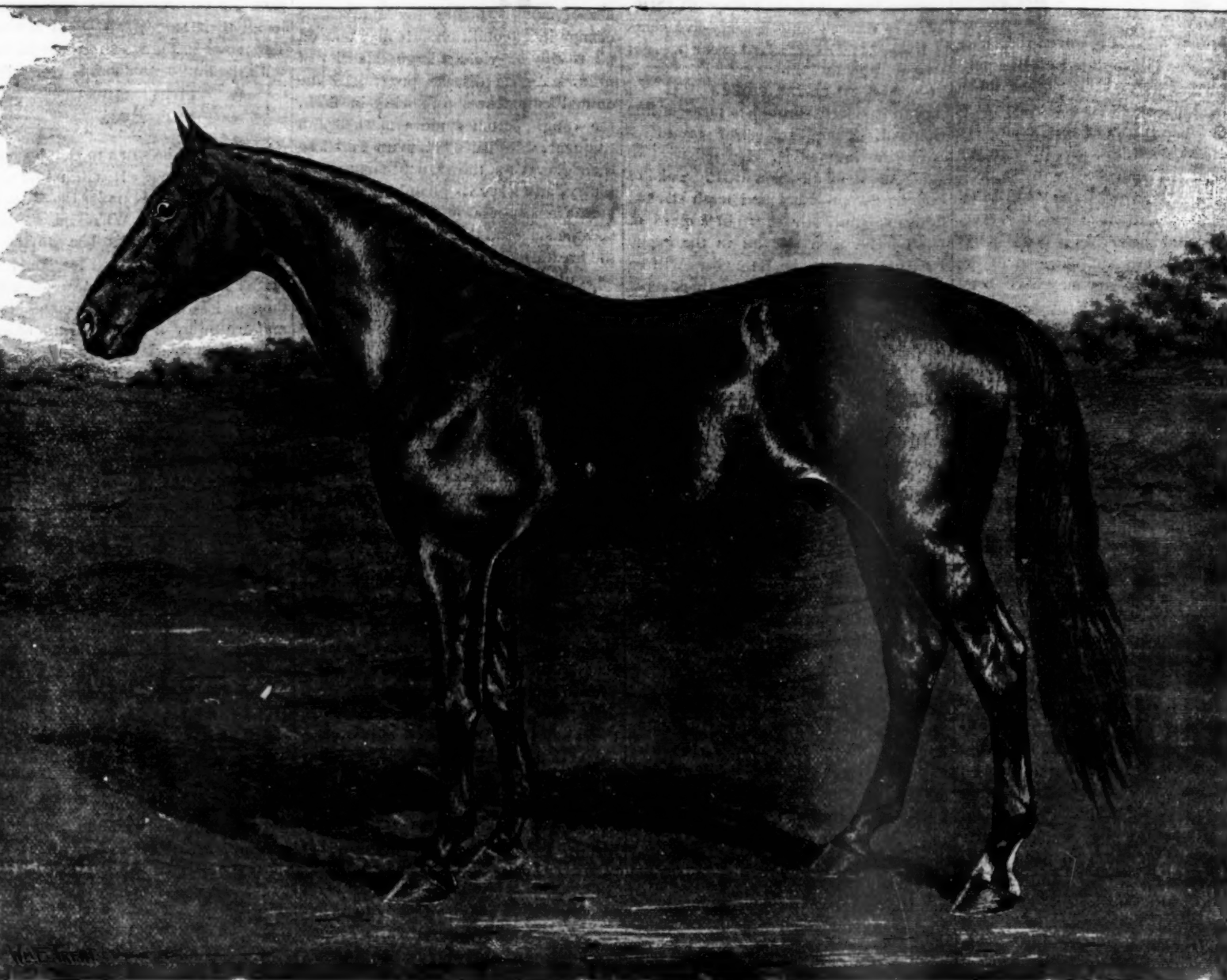
The successful construction of such a plant requires the services of some one familiar with it, and it is therefore not necessary for me to do more than call attention to it here as a highly recommended system for homes, especially in villages, where the proper amount of land is procurable and where the sewage must be disposed of in a manner both inoffensive and safe. In any case, the soil of such land must be porous, not clayey and retentive. Those who wish to familiarize themselves with the details will find descriptions in the Sanitary Engineer for 1884, page 530, by Philbrick; in "Disposal of Household Wastes," by Gerhard, and in "Sewerage and Land Drainage," by Waring. The entire plant, said to cost \$200 to \$300, the annual expenditures for cleaning, repairs, etc., about \$10.

### SUBSOIL IRRIGATION.

The method of subsurface irrigation just described may be too complex and too expensive where land is abundant and neighboring houses at some distance. The simple method of surface irrigation may be resorted to by laying out from the house—at least 100 feet—from the house a small sewage farm where the sewage may flow in shallow trenches over the surface and slowly sink into the ground. Such an irrigation field must have the same qualities demanded by subsurface irrigation. Its surface should have sufficient slope and the soil should be porous, not retentive. The liquid sewage, including kitchen and chamber slops, is conducted to this field in a water-tight tile drain and then allowed to flow into shallow trenches. To avoid the overloading of the soil with sewage at any one place, the main distributing trench should be so arranged that it and the irrigating trenches branching from it may be temporarily blocked at any point to divert the sewage into one or more different trenches every day. In winter the warmth of the sewage will keep it in motion and the filtration will go on although the field may be covered with snow and ice. The use of the flush tank as described above would cause a more uniform distribution of the fluid over the field and make the filtration distinctly intermittent. The ground between the trenches may be cultivated to increase the amount of evaporation. If conveniently situated, an orchard may be used as the irrigation field. It should be distinctly understood, however, that marketable fruits and vegetables should not be carelessly allowed to come in contact with fresh sewage, nor should the irrigation field be near the well unless the latter is fairly deep and tubed or tiled to the surface of the water.

### KITCHEN AND CHAMBER SLOPS.

The removal of kitchen and chamber slops is a matter which also requires proper attention, as this liquid frequently gives rise to unhealthy conditions, annoying alike to sight and smell when carelessly disposed of. The simplest way to utilize kitchen slops is to pour them upon plants about the house in summer, in winter upon the soil, each time in another spot, so as not to supersaturate the surface layers of soil in any one place. A means of less trouble recommended by Waring is to partly fill with soil a barrel with leaky bottom and cover this with a layer of stable manure to prevent the puddling of the soil. The slops filter through the soil and leave the barrel below as a clear fluid. The barrel is emptied two or three times a year and the contents used for fertilizer.—Theobald Smith, M. D., U. S. Dept. Agriculture.



MESSENGER WILKES, 2.23. WINNER OF THE HERD PRIZE AT THE BOSTON HORSE SHOW.

Under such conditions, cattle trading becomes something of an exact science and the man must be rather dense who cannot obtain a reasonably fair bargain when everything is thus ascertained and guaranteed by a responsible party. To conduct business by this plan would be a relief to farmers who have suffered by the tricks and sharp practices of the professional cattle men of the public markets.

### Ice for the Dairy Farm.

A reminder of the importance of storing ice on the farm will be in order at any time during the fall and winter months, yet an early hint is better than a late one, as it gives the farmer opportunity to put his ice house in order if he has one; to build one if he has none; and in either case to secure non-conducting material, such as sawdust or tan bark for packing the ice, if located where either or both are conveniently obtained.

An ice house need not be an expensive construction. In fact, any rude building made of rough boards will answer the purpose. Good drainage must be provided for, also good ventilation. The drain must not admit a current of air to the ice. There must be a good foundation or bed on which the lower layer of ice is to rest, and it should be covered with non-conducting material.

### The Pick of the Herds.

HOW SELECTED, TESTED AND RECORDED CATTLE MAKE TRADING EASY.

Cattle for a large milk farm near Boston are bought in the dairy section of northern New York, and some splendid milkers are thus secured. The purchaser is not satisfied to bargain for whatever animals the farmers are most willing to dispose of. His method is to visit the owner of a fine herd and to put the query, "How much for my choice of three to six of your cows?" The bargain is completed on this basis. The prices are perhaps rather high for that section, but, brought east, these selected milkers are eagerly sought after at an advanced price by the farmers in the neighborhood.

This milk raiser believes that cows giving from seventeen to twenty-two quarts are cheaper at from \$50 to \$100 than common cows at common prices. Another feature of the plan conducted by this milk farmer is worth quoting. As before stated, some of these milk cows are sold to other farmers, but not until each animal has been tested by tuberculin and given a certificate of health, and not until her milk product has been weighed and recorded. The intending purchaser visits the cow barn, and picks out a cow to suit him. The record of every cow for the whole period for which she has been kept there is on file, the milk being weighed every day by the foreman. The date of calving is recorded, the certificate of the tuberculin test is at hand, and the visitor is allowed to examine the cow and to take home a pint of the milk for trial.

The writer has a printed sheet, giving directions for building and filling ice houses in several different ways, that he will send to any one asking for it and enclosing stamp for postage. With the directions it gives, no one will have any trouble in building and filling an ice house. F. W. MOSLEY, Clinton, Iowa.

WHEAT meal is worth more, pound for pound, than corn meal, as a milk-producing food.

### Early Southern Corn.

VALUABLE FOR ENSILAGE WHEN MATURE, BUT LESS RELIABLE THAN FLINT VARIETIES.

The earlier varieties of Southern corn are popular among the ensilage farmers of New England, because of the enormous weight of fodder produced. In the three southern states of New England the grain will mature sufficiently for the silo, unless the season is unusually short.

### AN EXTRA EARLY STRAIN.

During the season of 1895, at the Experiment Station, Kingston, R. I., a small area was planted to "Extra Early Leaming" field corn, a yellow dent variety which in the most favorable circumstances matures in 100 days from time of planting, and this season ripened perfectly.

The seed was a trial package sent out by the Seed Division of the Department of Agriculture, Washington, D. C., and about one-fifth of an acre of land which had formerly been used for a pasture and was, in 1891, planted to potatoes, with a dressing at the rate of about ten cords of barnyard manure per acre, and followed by blackberries and raspberries without the use of manure or fertilizer again until 1895, when about twenty cords of barnyard manure were applied per acre and plowed under, and it was then planted to this seed corn.

It was in a location isolated from other varieties of corn and consequently produced corn true to the variety. The corn was planted on May 11. The hills were put in three and one-half feet apart each way. The seed sprouted and came up very evenly and grew rapidly; very little cultivation was necessary, for the corn plants soon shaded the ground and retarded the growth of weeds.

By Sept. 15 the stalks had reached the height of eleven to thirteen feet, many of which bore two ears each at a height of four to six feet from the ground.

The crop was left standing as late as possible, in order that it might fully mature and yet not be at the mercy of the frost.

The corn was cut on September 27 and set up into shocks. It required two men to bind the shocks and it was necessary for them to stand on barrels in order to bind at the proper height. On October 19 the corn was husked and the stover and ears weighed. The latter gave a yield at the rate of 115.7 bushels of

shelled corn per acre, and the stover weighed at the rate of 6.3 tons per acre, while our R. I. Capped corn, although planted on not so strong land, produced 62.27 bushels of shelled corn, and 1.96 tons of stover per acre.

### LEARNING CORN.

The Leaming variety of dent corn originated in Ohio, and is considerably grown in the western and southern states. From twenty-two experiments conducted in thirteen different states of this country, it is observed that the grain did not mature in four of them, viz.: Wisconsin, South Dakota, Vermont and Minnesota, while in Mississippi, Arkansas, Indiana, Illinois, Louisiana, Tennessee, Ohio, Kansas and Iowa, it matured very satisfactorily. The average length of season of its maturity is 118 days, with a height of stalk reaching ten feet on average, ranging from seven to twelve feet. It has been grown with over 150 other varieties, and it ranks with the best in every case, and in some cases it is found ranked among the very best, maturing early and producing large yields of grain and stalk. The length of ear varies from seven and one-half inches to ten inches, and produces, averaging from the whole number of experiments, a yield of fifty-three bushels of shelled corn per acre, the greatest yield being about seventy-five bushels. The average weight of stover is found to be about three tons per acre, while the highest yield was but four tons. The average weight of green fodder is twenty tons per acre, with a maximum yield of twenty-five tons.

### DENT OR FLINT?

In those sections of New England where the Leaming corn fails to glaze over in time to be cut for the silo before being injured by frost, this variety is less durable than the common northern field corn. In this latitude the Leaming will usually mature sufficiently if planted fairly early on rich light land. But whenever it fails to mature because of an early frost, the resulting ensilage is rather poor and watery and much less desirable than when made from the smaller kinds.

In northern New England the dent varieties are not recommended unless the growth can be pushed very fast. Analysis of experimental crops grown at the Maine College farm indicated that

the Maine Field Corn was in this case worth forty per cent more than the immature Southern Corn, pound for pound, judging simply by the per cent of dry matter. The great bulk of Southern Corn fodder is not a proof of greater or even of equal value unless the grain is mature.

It appears from the figures that not only is there a constant and large growth of starch and sugars up to the condition of maturity of the corn plant, but these valuable compounds increase more rapidly than certain less important constituents, so that the mature plant substance is of better quality than at any previous stage of growth.

The practical conclusion is that three pounds of ripe ensilage corn is worth more than five pounds cut when immature, and the observing ensilage farmer will conclude to grow only those kinds of corn which he can bring to sufficient maturity in his conditions of climate and soil.

### A "Gilt Edge" Milk Route.

H. A. Gurler, the Illinois Dairy writer, sells his milk in Chicago. In a circular advertising the sale of his milk he describes in detail the processes used in its care.

The milking cows are daily groomed and their udders washed with warm water; the milkers thoroughly cleanse their hands and put on a milking suit over their ordinary clothing before milking. All pails, strainers, cans, etc., are thoroughly cleansed, and the bottles in which the milk is shipped to the consumer are sterilized by live steam.

The first few drops of milk drawn are rejected, as experience has shown that germs which cause the souring of milk invade the passages of the teats and cannot be got rid of by external washing.

As soon as the milk is drawn it is run through a centrifugal separator; the cream and milk which has been separated from each other are mixed as they come from the separator. This is done to cleanse the milk; it leaves behind in the machine a great deal of dirt which cannot otherwise be removed from the milk, even under the most careful conditions. The milk is then cooled to a temperature of between 34 and 40 degrees, and bottled, stopped with a white pulp stopper, and a paper seal put over the top in such a manner that the milk cannot be reached unless the seal is destroyed. On each seal is stamped the date of the bottling.

A refrigerator wagon carries the milk from the dairy to the shipping station. The milk is sold under a guarantee that it shall never contain less than four per cent of fat, and that in its preparation all of the above precautions have been fully observed. The herd is inspected every month by a veterinarian, and the animals have been tested twice with tuberculin.

### Home Market Neglected.

In regard to the matter of supplying hotels with produce, I was talking with Mr. Ricker of the Poland Spring House, and I asked him as to the amount paid by that house for farm products, especially eggs, butter and milk (with some other, what I might call minor, products) and he said \$40,000 a year. I asked him what proportion of those products were furnished by the farmers of Maine, and he said, "We have to get all our eggs and poultry and a large portion of our butter from Boston." Then he qualified it and said, "There are two or three men in Poland and New Gloucester whom I can rely on, and who make a contract to furnish me with so many eggs on such and such days, and I know they are coming and can count on them." If the farmers of the county would only furnish him with these products, he said, he would rather pay them the profit which he is paying to somebody else. Whereas, they are shipping their products to Boston and the dealers are sending them back to him. There is a groceryman in Augusta who has been trying for the last three years to find a farmer who would furnish him ten head of poultry a day. Several have made a contract with him, but before the lapse of two months they dropped out.—T. E. Skolfield, Sagadahoc Co., Maine.



## Experience with the Red Raspberry.

By C. E. CHAPMAN, N.Y.

The red raspberry is one of the easiest grown of the small fruits. It can be set in either fall or spring with uniformly good success. Should some plants fail, the vacancy will soon be filled by the new plants coming up from the roots. With proper care one setting will be all that is necessary for ten years or more. Our original bed of Cuthberts is yielding a good crop this season, although twelve years old. They are uniformly healthy and do not require very rich soil. A light coating of manure among the canes once in three years is usually enough and better than more, too large a growth of canes not being conducive to a large crop of fruit. The objection claimed against it, of suckering, which makes extra work, is ill founded and is a merit instead. The suckers are easily killed by cultivating just as they begin to break through, two cultivations, a week apart, being sufficient. The profusion of canes in the row enables one to select stout, vigorous ones, have enough to form a hedge, without vacant places, and requires no extra setting.

### CULTIVATION.

The largest crops are picked from rows at least two feet wide, four to five feet high and averaging four canes to the foot. The wind does not affect such rows and they need not be set more than six feet apart. By this method but little land remains uncultivated, and that is shaded so that the weeds make but feeble growth, if any. One good hoeing per year, after harvesting, is all that is required, provided all grass was killed by one or two plantings of hoed crops before the raspberries were set. We cut out the old canes, cut back the new growth to four feet, plow between the rows with a one-horse plow, harrow thoroughly with one-half of a spring tooth harrow, set to run deep, thin the canes so the snow will not break them down, scatter a light dressing of manure among the plants, cut out the small weeds, all of this in August, and then our work on them is done for the year. In large plantations we drive so one row will be beneath the wagon when manuring, no harm is done the short trimmed plants and the necessity of carrying the manure avoided. No other farm crop will yield as much profit for that amount of labor.

The diseases and insect foes of the red raspberry are, in this section at least, conspicuous by their absence. For the last two years we have had some loss by a, to me, new disease, that of the upper third of the cane dying when the berries were half gone; aside from this nothing has ever affected them. An expert from the experiment farm came and examined them but failed to give any remedy or cure for the disease.

### THE BEST VARIETIES.

The Marlboro gives a good crop of early berries and the Cuthbert, which is much the largest and most profitable, comes as the Marlboro begins to fail. These two are enough for any family and most profitable for market.

Shaffer's Colossal has a flavor liked by many, is a fair to good producer, but its warty shape and dull color are against it for a retail trade. "They are beginning to rot now!" said a lady in reply to my suggestion to try them. They were fully ripe, as all fruit sold for table use should be to give best satisfaction and hold trade, but had not been picked two hours. The taste for red raspberries has to be cultivated by some people, but the sale for table use, in communities that are educated up to it, is much larger than that of the black. Our customers used to ask if there were worms in them, their experience with the wild ones, which are always more or less wormy, having made them cautious, but the big, firm, luscious Cuthberts soon won an allegiance from many that none of the other berries can shake. The other varieties so far as I have tried are no improvement over the two mentioned, and they are now so widely spread that any one should be able to get them near home at a very small cost.

### FOR FAMILY USE.

Any man owning land who does not grow enough of this healthy, palatable fruit because of the labor is too lazy to live. Twenty-five plants will soon fill up the row and furnish fruit enough for a family. If kept mulched with straw deep enough to prevent weed growth and the canes are properly trimmed, the family supply, of all they could eat fresh and canned, would not cost a dollar per year.

Yet not one land owner in a hundred has a single bush, and many eat the worm-infested, sour "fence berries" gathered by a faithful but tired wife or go without, because they are too lazy, thoughtless, or think there is some mystery about the growing which they do not understand. It is a very simple, easy thing to do, yet many are honest when they say: "I do not know how." Every country school yard should have plants growing upon it and the children given lessons in the art of propagating, setting out and caring for all kinds of small fruit, and should the plants yield enough to give each child a taste and create a desire for more, no harm would

be done. The knowledge gained would do away with the mystery, and the craving for fresh fruit, which never leaves one when once formed, would cause the planting of many "home comforts" by future "home owners," that, under our present system of education, would always remain ignorant of this cheap yet luxurious food.—Stockman and Farmer.

### Preserving Fruits in Lime.

Having previously read of the properties of lime for preserving fruits, vegetables, etc., packed therein, I decided to try the experiment, says a correspondent in American Gardening, so last October I took a small starch box and laid bunches of Merimac grapes in layers in the bottom and covered them over with air-slacked lime, jarring it down thoroughly through the grapes, leaving the layer hidden under the lime, then added another, and covered as before, continuing in like manner until the box was two-thirds filled, over which I placed two layers of ripe tomatoes, packed as were the grapes, and placed them away in a dry cellar. In November and December I removed the tomatoes and found them in excellent condition, the last ones having been taken from the lime six weeks after they were packed. The grapes at this time were in perfect condition. A few grapes were removed from the box in January, February, March, April, May and June, in eatable condition. Some, however, had dried and shriveled up completely, while others were not changed in the least; but the drying may have been caused by the unusual dryness and high temperature of the cellar, which scarcely ever goes below forty degrees in the severest winter weather. From the above I feel convinced that if grapes and perishable vegetables were packed carefully in this manner at the proper time in the fall, before frost had injured them, and kept them in a cool, somewhat dampened cellar or other storage vault, that we could enjoy these luxuries for some months after their ripening season.

### Celery Growing.

A Massachusetts subscriber writes: "How do you bank celery? At what stage of its growth? How high do you bank? Is it best to bank the self-blanching varieties?" We usually make a difference between the early and late crop, answers T. Greiner in an exchange. For the former we set self-blanching sorts, especially White Plume and Golden Self-Blanching, during latter part of May, and aim to have stalks fit for use during July and August. The plants are set in rich and well prepared ground, in rows, and kept well cultivated until the stalks are a foot or more high. Then we simply set up old boards, say, six to ten inches wide, and of any lengths we may have, edgewise against the celery rows from each side, thus covering the plants well up to a few inches of the tips of leaves. In good growing weather, especially when the ground has sufficient moisture, the celery will blanch fit for the table in ten days or two weeks. Late celery, of which Giant Pascal is our favorite, may be blanching by the same means; but more frequently we use the earthing-up process. At first we simply haul up soil from between the rows up against the plants, thus giving them an exact and compact shape or position. Then, when they are a foot high, we begin earthing up, and always bank up pretty well to within a few inches of the tips of the leaves. Celery for use late in winter and during spring need not be earthen up, nor blanched outdoors by any other means. We simply haul some soil up to the rows, to make the plants grow erect, and then store in trench or cellar, where they will blanch all right.

### Timothy Hay Expensive Feed.

Mr. Manchester tells how he uses bran in the place of hay for feeding cows. Pound for pound, the bran is cheaper than the hay, and if the latter were ground as fine as bran, it would occupy but little more space. In fact, as we have often stated, timothy hay is the most expensive food one can give to a cow. At the writer's home good hay sells at \$22 a ton from the farm. The best of baled hay cannot compete with it. "With a silo and a few acres of oat hay to feed as dry roughage, our farmers might sell nearly all their timothy and thus make it one of the best crops on the farm."

Many people still think it a wise policy to stuff a horse with twenty pounds or more of long hay each day. The Rural New Yorker has often told its readers of a new horse food in which hay, corn and oats are all ground to a coarse powder. This feed is, we understand, giving the best of satisfaction, and is certainly more economical than long hay and whole grain.—Rural New Yorker.

### Cabbages for Swine.

Professor Henry, of the Wisconsin Experiment Station, finds that cabbages have a good deal of value—more than potatoes or turnips, as a swine feed, especially in the first part of the fattening period. The cabbage is large-



ly used in England for feeding both hogs and sheep. It is found to be an excellent addition to a grain ration, as it aids digestion and prevents "cloying" when grain is being fed heavily.

### Surplus Apples.

CAN BE SOLD AS BOILED CIDER, VINEGAR OR SAUCE. HOW TO MAKE THEM.

In view of the large apple crop in many parts of this country, it behooves those who have a surplus of apples to inquire what they shall do with them. We are offered only seventy-five cents a barrel for ours. Last year we got two or three dollars.

### TO FILTER CIDER.

Run it slowly through a mass of fine charcoal. There is a better way to remove the impurities. Let a barrel of cider stand in an open cask. Take of each hardwood ashes and fresh slacked lime one pint, stir these in a quart of fresh milk, then stir all in the cider. In ten hours all the impurities will be on the top in the form of a thick crust or scum. This can be skimmed off, or the cider can be drawn from near the bottom. Have a new clean barrel ready, put in three or four gallons of the clarified cider; saturate a cotton rag with melted brimstone, set fire to one end, hold it in the barrel through the bung-hole, keep the smoke in; when the rag is about consumed put in the bung, roll and shake the barrel until smoke and cider are incorporated; then fill completely full, store in a cool place, the teria of ferment will all be killed and the sweet cider will be lasting. Some claim to keep cider sweet by adding an ounce of salicylic acid to the barrel, others add certain quantities of charcoal, mustard seed and the bark of sassafras root. All claim good success; but whatever is done with cider not to be made into vinegar, the bacteria of ferment should be destroyed, otherwise, "the cider barrel is very likely to lead to the whiskey barrel."

### BOILED CIDER.

Another way to keep cider is to boil it down, three to one. This is useful in making mince pies, sauce of sweet apples and for other purposes. Some grocers keep it on sale. It can be retailed to families or sold by the cask to dealers. It has the advantage of keeping permanently. It makes a fine, tart, temperance drink for hot weather, in summer by reducing with water and adding a little sugar. Always boil cider in a copper kettle.

### APPLE BUTTER.

Apples and cider are put to great use in some parts of New Jersey and Pennsylvania in the manufacture of apple butter, both for home use and for sale. Cider fresh from the press is boiled down three to one. Sour apples are pared, cored and quartered or sliced, boiled cider enough added to cover and the mass cooked down until of the consistency to spread on bread. It must be stirred constantly while cooking, else it will burn through the thin copper kettle. The fire must be at the bottom of the kettle and not be permitted to blaze up at the sides. When made in a considerable quantity, a 28 to 30 gallon kettle is hung out of doors, on a sort of iron tripod so the attendants can pass all around it. A pole with a perpendicular stick attached to one end is called the "stirrer." This permits the one who uses it to keep a proper distance from the fire and smoke. It requires two persons to do it, one to stir the apple butter and the other to attend to the fire. They alternate in duties often, as the stirring should not cease a moment, and it is tiresome work. When nearly done, sugar is added to suit the taste. To test when sufficiently cooked, take out a spoonful, let it cool, and if it will spread like butter, it is cooked enough. If designed for market, when cool it is put into gallon crocks and usually sold to private customers at 70 to 80 cents a gallon, the crock to be returned. A person first tasting it is not apt to esteem it very highly; but after eating it two or three times, everyone like it. I say most emphatically I like it better than any other sauce. And then it is so convenient to have in the house. A good, healthful table sauce is always ready. Some families place it on the table at every meal, and it is always eaten, too.

### EVAPORATION.

And then there is another good way to prepare apples so they will keep indefinitely, or until one can dispose of them. I refer to evaporating them—not in the old-fashioned way of stringing the quarters on strings or drying them in the sun, where flies can deposit their eggs upon them to be hatched into worms later; but I refer to family evaporators to dry apples by the waste heat of the kitchen stove.—Practical Farmer.

### Bulletin on Tuberculosis.

The Illinois State Live Stock Commission has issued a special bulletin on the subject of bovine tuberculosis. Its most important part is that which tells how the presence of the disease may be detected. It says:

"In pulmonary tuberculosis, which is lung consumption, attention is attracted to a short, dry cough, interrupted and dry, apt to be heard in the morning or after several active movements. The animal may be thus affected for a number of months before any appreciable change in its condition. It may take on fat readily or yield a large quantity of milk. As the disease progresses the animal commences to shrink in flesh, the cough becomes more marked and frequent, the hairs turn up and lose their glossiness, the skin becomes pale, scurfy, and loses its pliability, the temperature may rise or diminish, the eyes become sunken, the cough distressing, the breathing short and labored at the least unusual exertion. Pressure against the side of the chest will cause the animal to evince pain, the udder becomes flabby or indurated and secretes very little milk, which is pale and watery. These symptoms may follow one another slowly or rapidly. Although the appetite may be fairly maintained throughout the progress of the disease, the animal wastes to a skeleton before it succumbs."

"When other organs than the lungs are the main seat of disease, the symptoms are very much more obscure and difficult of detection. It is seldom the disease becomes well marked before the animal has arrived at maturity, hence the disease is most commonly found in dairy cattle or animals that are kept for breeding purposes. In very young animals tuberculosis generally develops in the alimentary organs, especially in calves that are nursed by their dams. It is also manifest by diarrhea, bloating, emaciation and debility. Besides the recognition of physical evidence of disease, an agent is had in tuberculosis, that when injected under the skin of an affected animal produces in from eight to twenty-four hours a rise in temperature of several degrees, while it may not have any effect on healthy animals at all."

The tuberculin is then described at length. It is pronounced "almost infallible as a reliable diagnosis agent." "Tuberculin," the bulletin says, "is a product of the bacillus tuberculosis; it is prepared by making a pure culture of the bacillus in a proper fluid medium. Among hundreds of thousands of tests not a single case has been reported where the use of the tuberculin has produced any harmful or serious effects."

### When Pasturage is Short.

I am coming to the conclusion that the better way is, as long as there is anything green in the field, to cut and feed it to spile out short pasturage, rather than buy grain, and make up for this loss of winter feed either by buying both hay and grain or by keeping less stock. As for grain, I cannot afford to raise it to thresh at present prices. As a substitute I am raising Hungarian. With this I can put in my haying machinery without fear of threshing it out on the ground, and can say to the threshers, "I have no need of you," and what I save in labor I can put into western grain. I do not care to have much to do with cutting grain green to cure for winter use; it takes so long to cure it that there are too many chances of injury in stormy weather. And cut it when you will to feed whole in the winter time, I should not expect to save much in my western grain bill. For a balanced ration, meadow hay, straw, English hay, ensilage and grain mixed, are all right.—W. W. Andrews.

### City or Farm.

My advice to country boys and girls is to stay at home. I have lived here all my life, and in my younger days was often tempted to go to the city to get an easy job at a big salary, but I always waited to see how some other fellow made out. Some went to the dogs head foremost, others did no good, and only a few pulled up to the front. So I stuck to the farm, and while I am not rich I have a reasonable share of life's comforts, have raised my family well, and altogether am getting along far better than most of my comrades who went to the city.

What the country needs most at present is more educated, enterprising farmers. More talent is needed on the farm. Then farming communities will be more attractive places to live in, and the boys and girls will not want to go to town to live. At least, that is the way it looks to me.—Cor. Pittsburg Com. Gazette.

### Insect Emulsion.

Major H. F. H. Miller, a chemist of Sharon, very confidently recommends his recipe for an insect-killing emulsion, which preparation he says is sure death to army worms.

"One pound hard soap (16 ounces)

cut in shavings.

Two pounds sal soda.

One pound flour of sulphur.

One quart kerosene oil.

Eight gallons of rain water.

Boil the above (and when I say boil I mean boil) for an hour, stirring from time to time until all is well mixed.

More or less, according to this proportion, can be made and kept in a barrel ready for use. Before using stir up well and apply with a sprayer.

When the army worm is approaching, around the edges or borders of your fields, or if the worm has taken possession, then apply it anywhere or everywhere. It is sure death to the army worm in all its stages; even the eggs in their protective shield will be destroyed. This ingredient has such power of penetration that no army worm, eggs or germs in all their stages can stand before it. The moment the worm comes in touch with the liquid its doom is sealed."

### Rye.

Rye should be sown in October on all unoccupied spots. It will help the soil even if it is plowed under the latter part of next March. What an immense amount of fertility is lost during fall and winter on some garden land! No matter how level the situation, it will be more or less washed unless covered with manure or by a green swath of some crop. The rye also changes the mechanical condition of the soil. And even in spite of the chemists who declare that the rye cannot add fertility to the soil, the ground does get richer. Rye can even be drilled among turnips with great injury to the turnip crop.—A. Shirer, Montgomery Co., O.

### Irrigating Fruit Trees.

In a recent paper Prof. E. W. Hilgard, of California, said that much water makes fruit too acidulous and of poor quality. If there is too little water the fruit will be dry and small. The thing to be avoided is to not irrigate too much. If the ground is soaked all the season, the roots run near to the surface, and a drought would probably kill the tree. Irrigation has much to do with the flavor of fruit. Fruit men should study the nature of the soil, and irrigate accordingly. As soon as fruit is fully formed, irrigation should be decreased, as the tree needs rest as well as everything else.

### Milk Cooler.

We get the following hint from the Practical Farmer: Place the milk cooler by the well, so the water can easily be pumped into the cooler. Elevate it about one foot from level. Have it made of two-inch planks. On inside on these nail a few four-inch scantlings. On each side and end, on these scantlings, nail a board the height of tank. Fill up the space between the two layers with straw. Make a tight-fitting cover that can be slid to one side. Make a hole in upper part of tank where a spout can enter from the pump. Place the water trough so that one end of the cooler can rest on it. In the end of tank have a hole in the lower part so that the water from cooler can be run into trough when fresh water is needed.

### Digging and Storing Potatoes.

The digging and storing of potatoes by the average farmer is done in a very careless manner. The essential point is to retain the flavor until used, and to do this should never be left exposed to the sun or air, says the Indiana Farmer. Early varieties should be dug as soon as the tops are dead, or when the skin ceases to slip from the potato. If early varieties are left in the ground they will sprout, and thus destroy the flavor. Late varieties may be left in the ground until in danger of freezing. As soon as dug, they should be immediately stored in a dark, cool, and somewhat moist cellar.

## Merit

Made and Merit Maintains the confidence of the people in Hood's Sarsaparilla. It is a medicine cures you when sick; it makes wonderful cures everywhere, then beyond all question that medicine possesses merit.

## Made

That is just the truth about Hood's Sarsaparilla. We know it possesses merit because it cures, not once or twice or a hundred times, but in thousands and thousands of cases. We know it cures, absolutely, permanently, when all others fail to do any good whatever. We repeat

## Hood's Sarsaparilla

Is the best—In fact the One True Blood Purifier. cures nausea, indigestion, biliousness, 25 cents.

## CAMPBELL'S EARLY GRAPE

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name. Guaranteed safe against fraud. Largest stock of grape vines in the world. Small fruit. Introducing of unrivaled Red Jacket Gooseberry and Fox Currant. Catalogue free.

OEO. S. JOSELYN, Fredonia, New York.

Best and most valuable. Highest commendation from highest authorities. Hardy, healthy, vigorous, very productive. Early or late. Largest clusters, finest quality, not frost. Seeds none. Not so well known. Sold by many reputable Nurseries. None genuine without our name.



## POULTRY.



OUR BOSTON JOBBERS ARE  
JOSEPH BRECK & SONS,  
47 to 54 So. Market St., Boston.

## Feeding Fowls.

PRACTICAL SUGGESTIONS—IMPORTANCE  
OF GIVING WHOLESOME FOOD.

The United States Department of Agriculture devotes "Farmers' Bulletin No. 41" to fowls; care and feeding. On the subject of feeding, the bulletin says: In feeding for egg production a valuable lesson may be learned from nature. It will be observed that our domestic fowls that receive the least care and attention, or, in other words, whose condition approaches more nearly the natural conditions, lay most of their eggs in the spring time. It is our duty, then, as feeders, to note the conditions surrounding these fowls at that time. The weather is warm, they have an abundance of green food, more or less grain, many insects and plenty of exercise and fresh air. Then, if we are to feed for egg production, we will endeavor to make it spring time all the year round, not only to provide a warm place for our fowls and give them a proper proportion of green food, grain and meat, but also to provide pure air and plenty of exercise.

Farmers who keep only a small flock of hens, chiefly to provide eggs for the family, frequently make a mistake in feeding too much corn. It has been clearly proven by experiment that corn should not form a very large proportion of the grain ration for laying hens; it is too fattening, especially for hens kept in close confinement. Until the past few years corn has been considered the universal poultry food of America. This, no doubt, has been largely brought about by its cheapness and wide distribution. The recent low prices of wheat have led farmers to feed more of this grain than formerly, and with a consequent improvement in the poultry ration.

When comfortable quarters are provided for the fowls the nutritive ratio of the food should be about one-fourth; that is, one part of protein or muscle-producing compounds to four parts of carbohydrates or heat and fat-producing compounds. Wheat is to be preferred to corn. Oats make an excellent food, and perhaps come nearer the ideal than most any other single grain, particularly if the hull can be removed.

Backwheat, like wheat, has too wide a nutritive ratio if fed alone, and produces a white flesh and light-colored yolks if fed in very large quantities. In forcing fowls for egg production, as in forcing animals for large yields of milk, it is found best to make up a ration of many kinds of grain. This invariably gives better results than one or two kinds of grain, although the nutritive ratio of the ration may be about the same. It has been found by experiment that the fowls not only relish their ration more when composed of many kinds of grain, but that a somewhat larger percentage of the whole ration is digested than when it is composed of few ingredients. It has been clearly proven by experiment that food consumed by the fowls influences the flavor of the eggs; that in extreme cases not only is the flavor of the food imparted to the eggs, but also the odor. This of itself is sufficient reason for always supplying wholesome food for the fowls and seeing to it that none but wholesome food is consumed.

It is conceded by the majority of poultrymen that ground or soft food should form a part of the daily ration. As the digestive organs contain the least amount of food in the morning, it is desirable to feed the soft food at this time, for the reason that it will be digested and assimilated quicker than whole grain. A mixture of equal parts, by weight, of corn and oats ground, added to an equal weight of wheat bran and fine middling, makes a good morning food if mixed with milk or water, thoroughly wet, without being sloppy. If the mixture is inclined to be sticky, the proportion of bran should be increased. A little linseed meal will improve the mixture, particularly for hens during the moulting period, or for chickens when they are growing feathers. If prepared meat scrap or animal meal is to be fed, it should be mixed with this soft food in proportion of about one pound to twenty-five hens. It will be necessary to feed this food in troughs to avoid soiling before it is consumed.

THE GRAIN RATION should consist largely of whole wheat, some oats and perhaps a little cracked corn. This should be scattered in the litter, which should always cover the floor of the poultry house. It is necessary to have the floor of the poultry house covered with a litter of some kind to insure cleanliness. Straw, chaff, buckwheat hulls, cut cornstalks all make excellent litters. The object of scatter-

ing the grain in this litter is to give the fowls exercise. All breeds of fowls that are noted for egg-production are active, nervous, and like to be continually at work. How to keep them busy is a problem not easily solved. Feeding the grain as described will go a long way toward providing exercise. If the fowls are fed three times a day, they should not be fed all they will eat at noon. Make them find every kernel. At night, just before going on the perches, they should have all they will eat up clean. At no time should mature fowls be fed more than they can eat. Keep them always active, always on the lookout for another kernel of grain.

## GREEN FOOD

While perhaps not strictly necessary for their existence, some kind of green food is necessary for the greatest production of eggs. Where fowls are kept in pens and yards throughout the year, it is always best to supply some green food. The question how to supply the best food most cheaply is one that each individual must solve largely for himself. In a general way, however, it may be said that during the winter and early spring months mangel-wurzels, if properly kept, may be fed to good advantage. The fowls relish them, and they are easily prepared. As it is not difficult to grow from ten to twenty tons of these roots per acre, their cost is not excessive. In feeding these beets to flocks of hens, a very good practice is simply to split the root lengthwise with a large knife. The fowls will then be able to pick out all of the crisp, fresh food from the exposed cut surface. These large pieces have the advantage over smaller pieces in this respect: The smaller pieces, when fed from troughs or dishes, will be thrown into the litter and soiled more or less before being consumed by the fowls, and, in fact, many pieces will become so dirty that they will not, nor should they, be eaten. Large pieces cannot be thrown about, and remain clean and fresh until wholly consumed.

CLOVER, RAPE, ALFALFA. Clover during the early spring is perhaps one of the cheapest and best foods. It is readily eaten when cut fine in a fodder cutter, and furnishes a considerable amount of nitrogen. If clover is frequently mowed, fresh food of this kind may be obtained nearly all summer, particularly if the season be a wet one. Should the supply of clover be limited, or the season unusually dry, green food may be cheaply and easily grown in the form of Dwarf Essex rape. This should be sown in drills and given the same cultivation as corn or potatoes. When the rape is from eight inches to a foot in height it may be cut and fed. It furnishes a fresh, crisp food that is readily eaten. If cut a few inches from the ground, a second and sometimes a third crop will be produced from one seedling. Alfalfa will also furnish an abundance of green food. It must, however, be cut frequently, each cutting being made before the stalks become hard or woody.

A good quality of clover hay, cut fine and steamed, makes an excellent food for laying hens, if mixed with the soft food.

## VARIOUS HINTS.

Cabbages can be grown cheaply in many localities, and make excellent green food as long as they can be kept green and crisp. Kale and beet leaves are equally as good and are readily eaten. Sweet apples are also suitable, and, in fact, almost any crisp, fresh, green food can be fed with profit. The green food in many instances may be cut fine and fed with the soft food, but, as a rule, it is better to feed separately during the middle of the day in such quantities that the fowls have about all they can eat at one time.

The bulletin also shows the necessity of furnishing grit when fowls are confined, and meat of some kind to take the place of insect food. Fresh-cut raw bone is properly recommended.

## Maintaining Fertility.

The following is an extract from a recent bulletin issued by the Ohio experiment station: As between manure and commercial fertilizers, the latter gave the largest yield the first year, but the manure showed its effects for several years after all benefit from the chemicals had disappeared. At Rothamsted, Eng., commercial fertilizer, heavily applied, gave an increased crop for the next nineteen years, the total increase being 66 bushels over an adjoining plot of the same size which received no fertilizer at the beginning. At the same place, a plot heavily dressed with barn manure has shown an increased yield for 23 years, though no fertilizer has been applied since, the total increase being 341 bushels, and the last crop being double that on the plot which received no fertilizer at the beginning.

Grain grown continuously on the same land will recover only about one-third of the fertilizer applied; but if crops are grown in rotation including grain, roots, and clover, all of the fertilizer will be recovered.

Disolved bone-black was no more effective than phosphoric acid; but nitrate of soda was more soluble and more readily taken up by growing crops than linseed meal, cottonseed meal, or dried blood.

## APIARY.

## Establishing an Apiary.

A bulletin of the department of agriculture says: Spring is the best time to establish an apiary, especially for a person unacquainted with the practical care of bees. Colonies in good condition secured then are more easily kept in order by the novice than if purchased in the fall. Mistakes in management may possibly be remedied before the season closes, and by the time it is necessary to prepare for the winter the learner will have gained a certain amount of practical knowledge of the nature and requirements of bees.

If the start be made late in the season, mistakes, if they occur, may result fatally before the proper remedy can be applied. The beginner had better obtain his start by purchasing one or two colonies of pure Italian or Carniolan bees in accurately made frame hives and in first-class condition. These he should get from some bee master of repute near his own place if possible, in order to avoid expressage and possible damage through long confinement or numerous transfers. The cost per colony may be \$6 to \$8; yet bees at this price will generally be found to be much cheaper in the end, for, though common bees in box hives may frequently be obtained at half price or less, the cost, when finally transferred into frame hives, fitted up with straight combs, and the common queens replaced by Italians or Carniolans, will not be less. The possession of a colony already in prime working order gives the novice a standard with which to compare all others and often enables him to avoid costly experiments.

Another plan, also commendable, is to agree with some neighboring beekeeper to deliver as many first swarms on the day they issue as are wanted. These will give the right start if placed as soon as received in hives with foundation starters and the frames properly spaced, one and three-eighths inches from centre to centre, it being understood that the swarms are early and prime ones, with vigorous queens. Only those issuing from colonies that have swarmed the year before or from such as were themselves second swarms of the previous year should be accepted. Swarms from these will have queens not over one year old.

It is better to have queens of the current year's raising, but these can only be obtained by taking the second or third swarms from a given hive, which come later and are smaller, or by substituting young queens for those that come with the swarms.

NOTES FOR BEEKEEPERS. Removal of all the queen cells will stop swarming.

There are more failures from bad management than bad seasons.

A cell properly developed and of full size is certain to produce queens.

Glass packages always show the honey just as it is, and the buyer sees just what he is buying.

Drone-laying queens are worthless in every respect, for the drones they produce are deficient.

Be on the lookout for drone-laying queens. A good colony will soon be destroyed by them.

A colony for hatching should at all times be strong and contain brood in all stages of development.

Bees will destroy an old, worn-out queen, but only when conditions are favorable for raising a new queen.

Honey just after being taken from the hives should be put into open vessels, and allowed to ripen before storing away.

Giving the old swarms a young fertile queen as soon as the first swarm has left will usually prevent second swarming.

As soon as the honey flow or the heaviest part of it is at end remove all surplus honey intended for market or family use.

You can extract honey from frames partly filled with brood at any time. It is not necessary to wait until they are sealed over.

Surplus departments or upper stories should be kept on the hives during the summer season, as quite a surplus may be stored at intervals.

It will be a good time now to lay away a few combs of sealed honey for the bees to use next winter. It beats feeding and is better for the bees. —Journal of Agriculture.

An agriculturist of Westphalia made a bet that twelve bees, released at a distance of three miles from the hives at the same time as twelve pigeons, would travel over the ground as quickly as the birds. The first bee entered the hive one-quarter of a minute before the first pigeon reached its columbarium. Three other bees arrived before the second pigeon, and the remainder of the competitors reached home simultaneously. —Terre Haute Express.

BULL CALF FOR SALE—By Brown Bees' Son 34550, out of a Tennessee bred cow with a test of 17 lbs. 9 oz. in 7 days, and 650 pounds of butter in one year. This cow is a daughter of the great Fanny's Harry, 1917. Grand chance to get a bull to head your herd. Address: HOOD FARM, Lowell, Mass.

## Cows That Last Long.

The manner in which the Jersey cow, or that of any of the other dairy breeds, has passed the early years of her life, or rather the treatment that has been accorded her, has much to do with determining her years of profit in the milking herd, writes Geo. Jackson, in the Breeders' Gazette.

If this has been humane or generous at all seasons of the year, old age infirmities will be slow to appear. She will be as good and as profitable at twelve or thirteen as another of equal capabilities to begin with will be at six that has suffered neglect under a mistaken policy that it does not pay to provide liberally for the dairy cow's wants even in winter, when the milk flow is lessened because of a long, hard strain in milk-giving for months, and inclement, changeable weather, and that it is unprofitable to feed much, and that the straw stack is good enough. Such treatment will bring on old age and a breaking down of the constitution, with a consequent weakening of the powers of production, and the lessening each year of profitable production is much more rapid in its progress than the years themselves would justify under best conditions. Proper care and humane attention.

A mistake may be made in the opposite direction, however, and the years of usefulness reduced by too liberal feeding—overdoing the matter by forcing the digestive functions beyond their natural capacity for producing extraordinary results, thus seriously and permanently causing mischief that can never be repaired.

The prudent owner of a herd of good dairy cows will therefore be guided by discretion and judgment in their management and care, catering to their requirements in a common sense and humane manner from the beginning to the end of the year. This will bring him success in business, will prolong the usefulness of his good cows and the maximum income and profits from his investment of capital and care. It is about the only road through which best results can be expected.

## Timely Fruit Notes.

Winter pears should be left on the trees as long as possible—until the leaves drop. They will be greatly increased in size and improved in flavor by so doing.

It is questionable whether it pays to prune the old wood from raspberry and blackberry bushes in the fall in order to give a late cultivating and hoeing. What weeds would go to seed might be cut with a scythe and left as a mulch rather than to have the ground bare over winter. The old canes are a support to the young ones during heavy snows.

Where blight or rust is prevalent in orchards it will be found of much help to gather and burn the leaves as they fall. Dead leaves are the winter resting places of many kinds of fungi, and much spring and summer work might be saved by destroying them.

Apples are so low that it will pay to ship nothing but the best. They should be hand picked, sorted and graded honestly and evenly and tightly packed in new, clean double-headed barrels of standard size. In sorting reject all scabby, wormy and misshapen fruit, and make two grades as to size. Culls and windfalls should be sold to the evaporators, made into vinegar or fed to stock.

Trees and plants set in the fall soon become established and are ready to start into growth several weeks before those set in the spring. They also stand a corresponding chance of being better able to withstand a drouth the first summer.

Don't be in a hurry to lay down the grapevines; wait until cold weather comes; then prune as you take them off the wires.—Stockman and Farmer.

## Siphoning Water From Wells.

It sometimes happens that a well is built upon a side hill and that there is use for this water below. In such cases the water can be siphoned, provided that the outlet is lower than the inlet and that the latter is not over thirty feet below the surface at the level of the sea, or proportionally less than that at greater elevations. The pipe must by some means be entirely filled with water to begin with, and all joints must be absolutely air tight. A suction pump at the outlet is probably the only practicable method of starting the flow when the pipe extends to the bottom of the well. In regard to siphoning from a well, H. C. Cray writes to Farm and Home as follows:

"In siphoning water from a well my experience is to use pipe about the size of water capacity of well. Have valve at lower end to regulate the flow, but let it run all the time about all the water the well makes. I have used half-inch lead pipe a good many years with success in a twenty-foot well, 150 feet from well to tank. There was an abundance of water for 100 head of stock. In case the well is where there is danger from frost, put in a float with a copper wire attached to a signal, so arranged as to raise the signal when the water is nearly down to

the end of pipe in well, and then bank the well in frost-proof. A screen should be put on the end of the pipe before putting in the well, like the cap on a garden sprinkler."

## The Market Garden.

BY C. E. DAVIS.

A successful gardener must have something to sell every day of the year. His produce must be of superior quality. A good article will readily sell at the top of the market, while an inferior article can not be sold at all. The land should be rich to begin with, and for most crops be given heavy applications of stable manure. Practice rotation, and include clover in the plan. Haul manure from the cow stable on the clover and plant vines (cucumbers, squashes, and the like) on the clover sod. Next year follow with potatoes. It will also be a good, clean place to plant onions. Plant seed of Early Jersey Wakefield cabbage in hot-bed about February 1st. Prick out 500 to the 3x6 sash; give them water and air. Aim to have the plants large enough and sufficiently hardened to transplant in open ground, by the middle of March. Plant seed of All Head Early cabbage in open ground as soon as it can be done safely, and continue thereafter about every two weeks, till the middle of June. All these plants will not be used, of course, but they don't cost much. The idea is to have a supply all the time till after July 1st, so that when a favorable opportunity occurs they may be used. It is not unusual to find, at the end of the year, that some of these plantings have done better and sold for more money than those expensively raised under glass.

The season for marketing bunch onions begins about as soon as the frost is out of the ground in spring, when the winter onions are sold for twenty cents per dozen bunches, seven in a bunch, followed by the produce of the Silver Skin sets, and these by Pritzaker, started in hotbed February 1st, which will end the season in July. For these crops the ground can hardly be made too rich. Cultivate the cabbage by horse power and the frequent use of the pronged hoe, the onions with a wheel hoe and Lang's hand weeder. The rotation, including clover, will help solve the weed question; long rows, horse power, hand wheel hoes, and the diligent use of the pronged hoe and Lang's hand weeder will do the rest. A sharp pointed lead pencil used daily is a valuable adjunct to the market garden.

Get a small vest-pocket blank book of about fifty pages, double ruled into squares. Head the pages with the names of the products of the garden. Number the pages and provide an index. No other writing required. Make a note in this book, under the proper heading, of everything sold, the quantity and the amount. Keep account of everything sold in the same way. The work is trifling, the double ruling prevents confusion, and when the season for anything is past, the figures may be added, and the quantity sold and the amount received determined exactly. Provide a summary in the back part of the book where the amounts are carried once a month, add up at the end of the year and the annual sales are shown to a cent, and the proportionate amount belonging to each product of the garden is seen at a glance. This is not perfect book keeping, because no account is taken of cost, but it is of a kind that can be done by anyone, however unlearned in the science of accounts, and will unerringly point out the mistakes and failures as well as the successes of the year, and will afford abundant suggestions for improvement in future operations in the garden.—Practical Farmer.

## Frost on Cranberries.

A light frost, such as would do no damage on the uplands, may be sufficient to spoil cranberries. Ex-Congressman William E. Simonds owns a natural cranberry meadow of twenty-five acres in Collinsville, Conn. This is said to be one of only three meadows in the State of any consequence which have a natural growth of cranberries. A frost early in September destroyed by estimate fully twelve hundred bushels of fine cranberries upon this tract.

## Potash

is a necessary and important ingredient of complete fertilizers. Crops of all kinds require a properly balanced manure.

## The Best Fertilizers

contain a high percentage of Potash.

All about Potash—the results of its use by actual experiment on the best farms in the United States—is told in a little book which we publish and will gladly mail free to any farmer in America who will write for it.

GERMAN KALI WORKS,  
93 Nassau St., New York.



Sold by Druggists, Grocers and Feed Dealers.  
Large Cans Most Economical to Buy.  
If you can't get it send to us. Ask first.

One, pack 50 cts. Five, Large 2.00. Ask first.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.

MEMBER COLORADO STOCK EXCHANGE.

ROOM 503 MINING EXCHANGE BUILDING, DENVER, COLO.

W. F. KENDRICK, Pres't and Mgr. \$50,000 PAID IN.











# MASSACHUSETTS PLOUGHMAN

BOSTON, OCTOBER 17, 1896.

Persons desiring a change in the address of their paper must state where the paper has been sent as well as the new direction.

The largest calves do not necessarily become the best cows.

The only cheap experience is that obtained by somebody else.

It is miserable magic that turns good cream into eleven-cent butter.

To spend is to save, sometimes, and there is also a saving that wastes.

Hungry land and hungry cattle are likely soon to have a hungry owner.

This is the season of year when the lazy man wishes he had worked harder in the spring.

Farm machinery will not run itself. Better less iron and more muscle, on some farms.

The Golden Rule upside down is the rule of neighborhood dealings in too many localities.

Wonderful how the old-time "western fever" has subsided during these years of fifty-cent wheat.

Movable fences are very handy, at this time of year, to fence away the cattle from the young orchard.

These are the last days of grace for repairing the farm buildings before the approach of cold weather.

In traveling through the country districts one sometimes encounters a strip of the new state roads. Oh! what a difference!

Among the most attractive of the apple exhibits at the annual show of the State Horticultural Society was the display by Mr. H. K. W. Hall.

The girls on the farm should have some chance to enjoy life. When they work hard at housework they should have a regular weekly allowance.

Don't begin now to brag of the crop you will grow next season. Quiet thinking is more to the point, while fall ploughing and manuring is vastly better than either.

Is your neighbor making money in the business which fails to pay you? The contrast should stimulate your curiosity to know the reason why. Investigate and compare.

Unless a man has business ability, it will not help him much to have a head full of theories about farming. But if he has energy, thorough knowledge will help him wonderfully.

A peculiarly shaped Astrachan apple was recently brought to this office by Mr. E. A. Saben of Winchester, N.H. The apple was nearly the shape and size of a Bartlett pear. In other respects it was like other apples of this variety.

Business judgment is of more importance than talent. Many a smart man wastes his talent by applying it in the wrong direction, while almost any one has ability enough to succeed when his effort is concentrated in the right direction.

It is surprising how many people are suspending operations, as nearly as possible, until after the election. The impression seems to prevail that all will be smooth sailing then. But the fact is that money will be hard to earn whichever way affairs turn.

The air is full of politics this month, and Farmer Slack may be seen almost any day, sitting on the top rail of the roadside fence and expounding his views on the currency question. On rainy days he goes to town for five cents' worth of blueing and remains until chore time.

FARMER SLACK never was really lucky with his hens. In spring they lay a good many eggs at fifteen cents a dozen, but when hen fruit is selling they show activity only in scratching over Mrs. Slack's flower garden. When the weather is cold they stand around on one leg, their feathers dingy and their combs blueish white. Just now they are roosting in the trees, but they will be transferred to the old henhouse as soon as Slack gets time to mend the holes in the roof and to board up the windows where the glass is missing. Sometimes the hens get too fat to lay, but there is little danger at present, because they need to work very hard to get a living from the few nibbles of corn which Slack throws to them. The henhouse has not been cleaned all summer, but it is possible that something of the sort will be done before freezing time. Last spring the hens had what Slack called "cholera," but the boys suspect that feeding the hens from the uncleaned floor had something to do with the bad luck. The boys think they could make the hens pay if given a chance, and perhaps they could.

## HOW'S THIS!

We offer One Hundred Dollars reward for any case of catarrh that cannot be cured by Hall's Catarrh Cure.  
F. J. CHENEY & CO., Toledo, O.  
We, the undersigned, have known F. J. Cheney for the last 15 years, and believe him perfectly honorable in all business transactions and financially able to carry out any obligations made by him.  
WEST & TRUX, Wholesale Druggists, Toledo, O.  
WALDING, KINNAN & MARTIN, Wholesale Druggists, Toledo, O.  
Hall's Catarrh Cure is taken internally, acting directly upon the blood and mucous surfaces of the system. Testimonials sent free. Price 75c. per bottle. Sold by all Druggists.

## TOPICS OF THE WEEK.

The construction of reservoirs for Boston's water supply has incidentally caused distress to numerous farmers who have seen their ancestral homesteads demolished and themselves forced to seek new homes for their old age. Some owners, of course, welcome the opportunity to sell their farms at a good price, while others resist to the bitter end. George Nichols, whose farm has been appropriated for one of Boston's new reservoirs, was visited by a reporter of a Boston newspaper recently, at his Fayville home. His case illustrates the feeling of many dispossessed owners in the reservoir districts. The family consists of an aged mother, a sister and Mr. Nichols. Asked to give an account of the trouble, he said: "The place has been in possession of our family for more than 100 years; we have been farmers and millers here all through that period. Two years ago our water right was taken away from us and we were obliged to close the mill, our chief source of income. It was a sad blow to my father. He died a year ago last May. That and subsequent troubles undoubtedly hastened his death. The mill was full of ingenious contrivances of his invention, and he had made many improvements about the farm. We had 300 trees in our orchard, nineteen varieties of apples; these, with the great black walnut trees in our yard, the largest in the state, were cut down and removed. I have watched the bare place where the removal of the earth has laid bare the underpinning of the house, and it is well enough now, but I don't know how it will be when cold weather comes. My cousin's house, barn and out buildings have been demolished and the recompense offered him is less than the actual cost of the house alone. They expect to finish the dam some time this fall," said Mr. Nichols in conclusion, "and I hope we shall come to an agreement. Otherwise, I shall remain here till they tear the building from over our heads."

With the retirement of Lord Rosebery the leadership of the English Liberal party devolves upon Sir William Harcourt, whose ability and long training as the lieutenant of Mr. Gladstone renders him the natural successor. Lord Rosebery was, however, Mr. Gladstone's favorite until recently, when the old statesman has been denouncing the policy advocated by Lord Rosebery in regard to the Armenians. Mr. Gladstone believes that Great Britain should independently arrange affairs at Constantinople, while Lord Rosebery does not. The indirect opposition of his former chief, was no doubt an important factor in bringing about Lord Rosebery's retirement.

The business world is rather quiet during these weeks immediately preceding election. It is quite common to hear of new enterprises which are projected, but not to be actually entered upon until after the people shall have decided the national financial and tariff policy. When these vexed questions have been settled, business men will be able to judge of the future. The state and town elections which have already taken place indicate a strong preference for the gold standard of coinage, in the eastern and northern sections of the country, while in the West and South the free silver sentiment is still very strong. The middle West is confidently claimed by both sides. The gold standard portion includes the most populous sections of the country, and controls a large number of electoral votes, but hardly enough to insure victory without the aid of some of the doubtful states in the center of the country.

The abundance of the apple crop leads to various novel plans for the disposal of surplus fruit. Giving them to the poor is one way. Nearly five hundred bushels of apples, the gift of farmers of Milford, N.H., arrived last Saturday at 12 Long Wharf, Boston, from where they will be distributed among poor people free. This, it is expected, is the beginning of a mission that will receive a generous support by fruit growers in New England, especially as the railroad companies have promised to ship, free of charge, all apples sent here for such purpose. The Associated Charities have worked for some time to awaken an interest in such a mission, and the carload from Milford is the first response. The Fitchburg Railroad over which they came, also carried them to the storage warehouse on Long Wharf. Here they are put up in bags and delivered to families receiving order cards from the Associated Charities, some families receiving two or three pecks, depending upon the condition of the family. It is called "Farmers' Fruit Offerings." If the free distribution is made with discretion, there can be little objection to the plan, but if free apples are given indiscriminately to all who apply, the result will tend to still further demoralize an already terribly overloaded market. There are many city families who cannot afford so much as a taste of fruit, and for these the free distribution will prove a most commendable line of charity.

The storm which raged along the whole Atlantic coast during the first part of the week was especially severe off New England, and much damage was caused by the wind and surf. Old Boston pilots declare that they never before saw the sea so heavy as it was on Monday. Crowds visited Winthrop, Nantasket and Nahant to watch the gale. Off Winthrop, the sea was foamy as far as the eye could reach. The pitching and rolling of the waves were impressive to an advanced degree. The waves were 20 feet high at times, and ran in a mass of foam 100 feet up upon the sands.

The special train with the Fitchburg R. R. popular Hoosac Tunnel excursion of October 17th leaves the Union Station, Boston, at 8.15 A.M. Rate only \$2.00.

## NATIONAL BANK VICE-PRES.

### A Most Important and Distinguished Testimonial For Dr. Greene's Nervura.

Hon. J. H. Hastings, Judge of County Court, Senator, and Vice-Pres. National Bank, Tells the People to Use Dr. Greene's Nervura to be Cured.



JUDGE J. H. HASTINGS, VICE-PRESIDENT NATIONAL BANK OF WATERBURY, VT.

You are sick and out of order and want to get well. To get well you desire to take the remedy which will surely cure you—the one which is strongly recommended by some one in whom you have perfect belief and confidence.

"Dr. Greene's Nervura blood and nerve remedy is the medicine which will surely cure you."

And here is the strongest possible recommendation to use it by one of the most eminent and distinguished judges in this country, Hon. J. H. Hastings, of Waterbury, Vt., an Associate Judge, Senator in the Vermont Legislature, Vice-President and Director of the Waterbury National Bank, and Treasurer and Trustee of his town.

Such is the exalted standing of the famous Judge and able financier who is enthusiastic in praise of the wonderful curative powers of Dr. Greene's Nervura, who has used it with most remarkable benefit in his own family, and who tells you that he has known so many cured by this grand medicine that he advises you to use it by all means, if you wish to get well.

Judge Hastings says: "I have heard Dr. Greene's Nervura blood and nerve remedy most highly recommended by my friends and neighbors who have used it, and know of several decided cures where people have been in a very feeble state of health and had failed to get relief from the usual sources.

"A lady who lived in my family has often

#### Ready for Greenfield.

The list of speakers has been nearly completed for the public winter session of the State Board of Agriculture at Greenfield, the first week in December. A full program will be given later, but the following names are sufficient to guarantee something well worth hearing. Among those who will give addresses are Major H. E. Alvord of Agricultural Department, Washington; Prof. W. H. Jordan, New York Experiment Station; G. W. Atherton, President Pennsylvania State College; Hon. W. E. Simonds, Hartford, Connecticut; Hon. J. D. Lyman, Exeter, N.H., with several short papers from residence of Massachusetts on "Dairy Practice."

Floods in Siberia have rendered thousands homeless and destitute. The great rivers of that country having overflowed large areas of the level land along their banks, submerging farms, washing away the buildings and drowning the cattle. Many farmers have lost their lives, escape being difficult owing to the depth and extent of the overflow. The floods were caused by the very heavy rains, which of themselves caused great injury to the crops.

Extensive shipment of Canadian cattle to Europe by way of Boston will soon begin, the inspection sheds having just been completed at Richmond, Vt. The completion of these facilities for the inspection of the cattle will result in the free admission of Canadian cattle for export by way of Boston, so long as they are found comparatively free from contagion. Permission will be granted to the Boston & Maine railway to make shipments by way of Richmond, subject to the usual requirements regarding government inspection. The department of agriculture will require that the cars in which the cattle are brought to Boston be kept as separate as possible from other cars containing live stock, and that they be thoroughly disinfected after each trip. The above arrangement will provide an adequate outlet for the cattle exports of the Northwest during the season when Canadian ports are closed.

A delectable outing is that covered by the Fitchburg R. R. popular Hoosac Tunnel excursion of October 17th. Rate for the round trip only \$2.00.

## Boston's Milk Supply.

THE EFFORT FOR QUANTITY AND THE LACK OF CARE HAS AFFECTED THE QUALITY.

The milk supply of Boston was made the subject of an address by Prof. W. T. Sedgwick of this city, last Thursday evening.

THE STRUGGLE FOR QUANTITY. The change from the old-fashioned farm to the modern dairy farm, the speaker said, had resulted in a deterioration of the quality of milk, because of a struggle for quantity. The price paid to the farmer is so small—sometimes less than two cents a quart—that the business, he added, will not allow him to strive for anything but quantity, or to keep help of a high class. The difficulties of the milk supply problem are thus present with the farmer as well as with the sanitarian. The problem is one that must have for its solution the intelligent co-operation of consumers and producers, of boards of health and of farmers and middlemen.

THE CANS. On the milk farm, the milk drawn from cows noted for the quantity of their yield, by help of an inferior type, is put into cans, ordinarily of tin, and stoppered with wooden plugs, which may or may not belong to the farmer, but more often nowadays are the property of the contractors or middlemen who buy of the farmers and sell to the peddlers. The cans, more or less battered, are returned when empty to be refilled, and they usually go back unwashed, with the drippings of the old milk left in them. It becomes more difficult to clean them, and decomposition of the old milk results.

LOSS OF IDENTITY. The next feature of the problem is different, but equally serious. It is the loss of identity in the milk. Usually it is not labeled with the name of the producer or even with that of the town, county or state whence it came, but is marked by numbers alone, which, indeed, serve to identify it, but only to the farmer and the middleman.

IN THE CITY. If the milk is "railroad milk," as a very large proportion in this city is, it arrives in the cans on special trains devoted to the business. The city milkmen or peddlers, as a rule, buy of the contractors, and take as many cans as they need from the cars, in or near the city, to their own mixing and refrigerating establishments. The trains arrive usually in the forenoon, and after the morning delivery, which is so apt to disturb the sleep of the city dweller, the same wagons may be seen at the trains loading up for the next morning's delivery.

TESTED AND MIXED. In the meantime the milk is not merely kept in the cans on ice. One of the most objectionable steps in the long process now begins. On reaching the milk house, often a part of the stable and unpleasantly near the stalls, the milk is tasted to see whether it is not already sour or "off flavor." As many as eighty cans may thus be tasted in quick succession, and the chances of the taster for becoming infected with any disease existing among the cans which are pronounced "good" are almost immediately emptied into a large tank called the "cooler" or "mixer," so that by mixing milk from different cans and often different dairies, an even grade of milk may be maintained day by day.

By this time the identification of the milk has become a hopeless problem, and the tracing of any infection attributed to the milk supply has become exceedingly difficult.

SUGGESTIONS. As a matter of fact, within the last few years, a number of epidemics have been traced to some man who was suffering from typhoid fever while working over the milk, and it is believed that slight infections of this kind occur often than is generally supposed.

The question of remedies is always in order, but not always is it easy to answer. Much might be done by introducing on a large scale the system of pasteurizing, which consists in the heating of all milk which is to be used for drinking or on cereals, puddings and the like, to a temperature of 160 Fahrenheit for a time, say, one half hour, long enough to destroy all dangerous germs. This process would also vastly improve the "keeping" quality of the milk, and so be in the direction of a wise economy for both the milkmen and the consumers.

Much might also be done by systematic efforts to educate the public regarding the dangers of milk, and how they may be avoided by greater care and cleanliness on the farms and in the milk-houses.

"Beautiful beyond compare," was the tribute paid the Deerfield Valley by an eminent traveler. His judgment was excellent, and if you take the Fitchburg R. R. popular Hoosac Tunnel excursion of October 17th to the Hoosac Tunnel you will be sure of it.

## Items of Farm News.

A New York paper estimates the value of the poultry product for this year at \$643,000,000 against \$275,000,000 in 1890 and \$118,000,000 in 1880.

Corn on the cob is selling at four dollars per ton or less in Nebraska, while coal commands about seven dollars per ton. Under these circumstances there is likely to be a large use of corn as fuel.

## Country Real Estate.

A fifty-five acre farm with valuable buildings and a large amount of personal property in Norfolk and Wrentham, owned by George O. Perkins, has been sold to Betsey Bernstein of Chelsea for about \$4000. W. D. Vinal of Boston has sold a residence on Washington street, Holliston, to Anne G. Perkins of Wakefield, on private terms.

—The American Board of Commissioners for Foreign Missions is holding its eighty-seventh annual meeting in Toledo. The year's receipts were \$743,104.

## Read and Run.

—The convention of Good Templars of the United States is being held at Chipewa Falls, Wis.

—A disastrous tornado is reported south of Edmond, O. T., in which several persons were injured.

—The year-old child of Mrs. John Clauer was burned to death in a New York city tenement by a live coal lighting its dress.

—A large tar still at the Standard Oil Refinery, Lima, O., exploded, fatally burning William Patrick and A. J. McElroy.

—Lewis Searles, serving a twenty-five-year term for burglary, escaped by the aid of a straw dummy, from the prison at Auburn, N. Y.

—New York's firebraves have been very active in kindling blazes in East Side tenements, and the authorities are making investigations.

—J. Montgomery Sears, a Yale graduate, has presented to the University the classical library of the noted German scholar, Ernest Curtius.

—The boiler of a freight locomotive exploded at Meriden, Conn., and wrecked the engine, but the engineer and fireman escaped with trifling injuries.

If you have tried Dobbin's Floating Balm Soap you have decided to use it all the time. If you haven't tried it you owe it to yourself to do so. Your grocer has it, or will get it. Be sure that wrappers are printed in red.

—All the paraphernalia of the last Peary expedition to Greenland, together with polar bears and Eskimo dogs and a quantity of skins, minerals and fossils, arrived in New York last week and were taken to the museum of natural history in Central Park.

—A switch train containing a long line of freight cars, with an engine at each end, was crossing from the New Haven to the Boston & Maine tracks near Northampton last evening, when the tender of the front engine jumped the track. The cars were piled in an immense heap. A wrecking train cleared the tracks.

—James C. McCleave picked up on the south shore of Nantucket a bottle containing the following message, hastily scribbled on the fly leaf of a book: "Saturday, Sept. 16. We are off Nantucket, twenty miles, and are about to sink. Please notify my wife, Mrs. Mary Frazer of Gloucester.—John C. Frazer. We will never reach shore alive. Goodbye."

—The house on the Brown place, two and one-half miles from Oxford Centre, was destroyed by an incendiary fire Sunday. Willie Trushaw, eleven years old, son of Nelson Trushaw, was asleep in an attic and was burned to death. Eli Dupuis, brother-in-law of the boy, in an attempt to save Willie, fell from the attic window and was badly injured. Eli severed an artery in the right arm. Nelson Trushaw, his wife and two children, escaped in their night clothes. The loss is \$1500. At seven o'clock Sunday night an unoccupied house in Oxford, one mile from the scene of the morning's fire, was burned by an incendiary.

The foliage of the Deerfield Valley is now painted with tints of the most gorgeous hue. Take the Fitchburg R. R. popular Hoosac Tunnel excursion of October 17th, and enjoy the sight.

## KITCHEN ETHICS.

It has been well said that the "dining-room is the theatre of man's hospitality," but we must not forget that the dining-room but gives expression to the accomplishments of the kitchen. For the dining-room is secondary; it merely serves what the kitchen creates—it is the show, room for the kitchen. And as "a man's hospitality is judged by the table he keeps," it is easy to comprehend the importance of having the best cooking apparatus, and especially of having that best when it is economical. And for these very reasons we recommend the world-famed "Mace" Grand Range. We are constantly hearing of its superiority—of its lustrous beauty of finish, its economical use of fuel, its rapid response to the cook's commands, and of the unique Patent Oven Thermometer, which reduces cooking to the science of absolute ease and uniform goodness. We are quite certain the Mace Furnace Co., Boston, will send any reader full particulars and circulars on request.

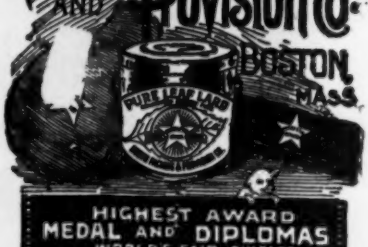
## MARRIAGES.

CHADWELL—MARSHALL—At Kingston, N.H., Oct. 6, Harris Chadwell of Amherst, Mass., and Carry Frances Marshall of Kingston, N.H. CLEMENT—FARNHAM—At Sharon, Mass., Oct. 3, Bert L. Clement of Sharon and Mrs. Emma J. Farnham of Nashua, N.H. DAY—STEVENS—At Lowell, Oct. 7, Ralph Ashton Day of Lawrence and Ethel R. Stevens of Lowell. EDWARDS—HAYWARD—At Milford, Oct. 7, Herbert S. Edwards and Grace J. Hayward. GREENE—FOSTER—At Fitchburg, Oct. 7, Ira C. Greene and Theresa W. Foster. ROUGHTON—COLE—At Fitchburg, Mass., Oct. 1, Clement Stevens Roughton and Martha Gilbert Cole. JEFFERY—OLIVER—At Salem, Oct. 7, Joseph N. Jeffery and Helen T. Oliver. MARSHALL—EMERY—At Sanborn, N.H., Sept. 30, Edgar Marshall of Bradford and Abbie Emerson of Sanborn.

## DEATHS.

ATWOOD—At Hingham, Mass., Oct. 1, Benjamin K. Atwood, 70 yrs., 11 mos. BENT—At Rehoboth, Oct. 7, Dr. Gilbert W. Bent of Walpole, Mass., 28 yrs., 10 mos., 27 days. HAYES—At East Boston, Oct. 4, Catherine Hayes, 80 yrs. HEARD—At Wayland, Sept. 29, Sarah Webster Heard. LAPHAM—At Sandwich, Oct. 4, George F. Lapham, 73 yrs., 11 mos., 4 days. SALLAWAY—At Sherborn, Mass., Oct. 7, Spencer Nolen 87 yrs. SALLAWAY—At Bedford, Oct. 1, Nellie S. Sallaway. STOKER—At East Sandwich, Oct. 2, Mary H. Stoker, 75 yrs., 2 mos., 9 yrs. TANTER—At Watertown, Oct. 1, Mrs. Abby Sanger Tainter, 80 yrs., 4 mos., 5 days. THAYER—At Dorchester, Oct. 1, Mrs. Mary A. Thayer, 63 yrs., 5 mos. WHEELER—At Falmouth, Conn., Oct. 4, Mrs. Maria B. Wheeler of Scarsdale, N.Y., 64 yrs. WHITING—At Castine, Me., Oct. 3, Mrs. Frances A. Whiting. WILLIAMSON—At Weymouth, Oct. 6, Mrs. Sarah Adaline Wise Williamson, 42 yrs., 4 mos., 13 days.

## NORTH Packing Division



FOR PURE LARD, HAMS, BACON, DRY, SALTED AND PICKLED MEATS, BARREL, PORK, PURE LARD, SAUSAGES.

FOR SOMETHING EXTRA CHARGE TO THEIR NORTH STAR BRAND SURE TO PLEASE.

## BOSTON Macular Parker Company

BEST CLOTHING FOR MEN  
BEST CLOTHING FOR BOYS  
MADE IN CLEAN WORKSHOPS  
ON THE PREMISES  
Macular Parker Company  
PROVIDENCE

## Literary Notes.

"ON THE STAFF," by Oliver Optic, is the fourth volume in the series of "The Blue and the Gray—on Land," and carries the hero of the preceding volumes, Dick Lyon, in his new position as a staff officer, into new and fresh fields, and amid scenes of a more stirring nature. The long and rapid march of the army under Buell to the assistance of Grant at Shiloh, the desperate conflict and final victory of Corinth, are all fully described. In these volumes Mr. Adams conveys to the youthful readers of the present day a realistic view of the exciting scenes and events of that memorable national period. The main incidents are historically correct, and the style is a fascinating fashion of clothing the facts of history in the garb of fiction is here delightfully set forth. Sturdy patriotism is the keynote of the motive of these tales, and the author inculcates in a convincing yet alluring manner the great lessons of honor, duty, and love of country. Price \$1.50.—Boston: Lee and Shepard.

THE ATLANTIC MONTHLY, for October, is one of the most important issues of the year. The leading article of the month, by President Eliot, of Harvard, is on "Five American Contributions to Civilization," viz., the practice of arbitration instead of war, the increase of wide religious toleration, the safe development of mobocracy, the practice of a thing well done, great variety of nations are fit for political freedom, and, fifth, the diffusion of well-being among the population in general. There is a second installment of "Girls in a Factory Village," by Lillie B. Chase Wyman, narrating many incidents of girl life in a New England manufacturing village. Mrs. Wyman gives very vivid word-pictures in these little sketches, and writes with intimate knowledge of her subject. Two essays in this issue are naturally spoken of together: upon widely different subjects, each possesses the charm of a thing well done. Mrs. Alice Morse Earle gives charming glimpses of a Sunday in New Netherlands and Old New York. While giving many unusual historical facts, the article is made doubly interesting by the fresh and vivacious style in which it is written. After all, the feature of this issue which will attract the widest attention is an innovation. A new department is opened, having the attractive title, "Men and Letters," to which our best writers will contribute short signed articles, on literary subjects, reminiscences, suggestions, criticisms and the like. The department is opened this month by W. D. Howells with a charming paper reminiscent of his days as editor of the ATLANTIC. He is followed by John Burroughs on "The Poet and the Modern," and by W. P. Trent on reading the 50th volume of Balzac.—Houghton, Mifflin & Co., Publ.

Two articles in APPLETON'S POPULAR SCIENCE MONTHLY, for October, will appeal strongly to those who enjoy the conflicts of science. "The Metric System," a defense by Prof. T. C. Mendenhall against the recent attack of Herbert Spencer, and "The Vivisection Question," by Prof. C. F. Hodge, a concluding article in which the utility of the practice is set forth. Whether silver be regarded as money or merchandise, the mining of it is an industry with an eventful history. The picturesque story of the Comstock lode is told in the October Monthly, under the title "Nevada Silver," with the aid of many views and portraits. The latest facts concerning "Acetylene, the New Illuminant," are set forth by V. J. Youmans. F. Schuyler Mathews calls attention to "The Significance of Leaves," giving illustrations of some of the diverse forms that leaves take.—New York: D. Appleton & Co. Fifty cents a number, \$5 a year.

The October number of HARPER'S MAGAZINE contains the first installment of Mr. du Maurier's long-expected novel, "The Martian." The opening scenes are laid in a boys' school in Paris in the early fifties, and the hero is introduced at the very beginning of his career. From this fact and from the hint conveyed in the introduction it seems not unlikely that Mr. du Maurier, following the example of Fielding and Thackeray, will attempt in "The Martian" to portray the character of a man in the same catholic spirit in which "Tom Jones" and "Pendennis" were created. Of one thing there can be no doubt. The story has all the continuity and charm of "Trilby" and "Peter Ibbotson," and the author's relation to his reader is as cordial and confidential as only Mr. du Maurier knows how to make it. A fine new portrait of the author of "The Martian" is the frontispiece to the number.

"HAVE YOU HEARD FROM MAINE?" is the latest campaign song, and comes from the pen of Father Locke, well known for his army songs, which he sung himself at the front during the Civil War. It is a taking song, and cannot fail to win for itself wide popularity. Single copies, 10 cents; per dozen, 50 cents; per 100, \$2.00. Any number desired will be furnished on application to the author, Father E. W. Locke, Chelsea, Mass.

The Deerfield Valley is now a symposium of autumn tints. Take the Fitchburg R. R. excursion of October 17th to North Adams, rate only \$2.00, and feast your eyes on the spectacle.

## Biliousness

Is caused by torpid liver, which prevents digestion and permits food to ferment and putrify in the stomach. Then follow dizziness, headache, indigestion, nervousness, and, if not relieved, bilious fever or blood poisoning. Hood's Pills stimulate the stomach, cleanse the liver, headache, dizziness, constipation, etc. 25 cents. Sold by all druggists. The only Pills to take with Hood's Sarsaparilla.

## Hood's Pills







## THE HOUSEHOLD.

## OUT-OF-DOORS ARITHMETIC.

Add bright buds, and sun, and flowers,  
New green leaves and fluff showers  
To a bare world, and the sun  
Of the whole to "Spring" will come.

Multiply these leaves by more,  
And the flowers by a score;  
The result—if found aright—  
Will be "Summer," long and bright.

Then divide the flowers and sun  
By gray clouds and stormy begun,  
And the quotient found will be  
"Autumn" over land and sea.

From this then subtract the red  
Of the leaves overhead—  
Also every flower in sight,  
And you've "Winter," cold and white.

—F. M. L.

## A VEXED QUESTION.

I went in the school-room one morning:  
My two little girls were there,  
And over their alms bending,  
Each with a puzzled air.

Mary glanced up as I entered,  
And said, with an anxious look:  
"Mamma, perhaps you can help us,  
It says here in this book,

"That we bought Louisiana  
From the French. Now that seems queer!  
For Nellie and I don't understand  
How they could send it here.

"Whoever brought the land over  
Must have taken so many trips,  
Nell says they put it in baskets,  
But I think it must have been ships."

—Ella Johnson Kerr, in St. Nicholas.

## JONATHAN.

I never recall without a shudder the  
terrible day and night I spent on his-  
torical Pike's Peak.

It was a beautiful day when my brother  
Theo and I attempted what we had  
planned for months—a trip on foot to  
this world-renowned spot. The air  
was clear and fresh and the weather  
seemed favorable. Nevertheless, we,  
living all our lives among these frown-  
ing mountains, ought to have known  
that the hazy, sullen red outlining the  
lofty peaks was a sure forerunner of a  
storm on the mountains. But with the  
impudence of youth, we shut our eyes  
to possible danger.

Everything was favorable to our plans,  
father being at the mines and mother  
away with a sick friend for a few days.

In a short time we were ready for our  
climb, clad in warm wraps, each carry-  
ing an extra one, when suddenly around  
the corner of the house dashed something  
that barred our way. It was Jonathan,  
his massive frame quivering with excite-  
ment, his large, bushy tail sweeping the  
ground with heavy strokes, and the big,  
brown, tender eyes beaming with plea-  
sure as he noted our preparations, for he  
was our constant companion on any  
weary tramp. He was to us a friend  
worth having.

Theo looked at me and I looked at  
Theo, then both spoke, almost simultane-  
ously:

"Not this time, Jonathan, old fellow!  
You must stay and guard the house."

At the tone the dog crouched on all  
fours, giving us one of those beseeching  
glances that never before had failed in  
its object; but Theo was determined, so,  
putting on his collar and chain, and  
placing food and drink within reach, we  
fastened him to his kennel, and with  
many a loving pat left him, with his  
howls sounding for a long distance in  
our ears.

Our intention was to follow the track,  
that wonderful railroad that took years  
to build, but, when completed, was the  
highest in the world. If we had done  
so all would have been well; but when  
we had passed up the longest and steepest  
incline of the whole route, and what  
was known as the Grand Pass, Theo sug-  
gested that when we reached the Half-  
way House we should change our course.

He knew, or rather had heard, of a  
short cut to the top; of course it was a  
rougher road, still, as we expected hard  
climbing, it would be no hardship; so,  
knowing from experience that it would  
be useless to argue the point, I yielded.

Hurrying onward, and giving rapid  
glances here and there at the magnifi-  
cent scenery that burst into view at  
every step, we soon reached Echo Rocks,  
famed for a wonderful echo that rever-  
berates from rock to rock. We called  
various names, among others that of  
Jonathan, and the response came swiftly  
and startlingly, as from a hundred  
voices.

Hark! We both stopped, startled,  
for surely we heard an answering bark.  
Yes, there it was again. Clear and  
sharp it sounded in the rare atmosphere,  
and involuntarily we turned, expecting  
to see our old playmate beside us.  
Laughing at our folly we passed onward,  
reaching the stupendous Hanging Rock,  
then on still further, when, on round-  
ing a curve, beautiful Minnehaha Falls  
burst into view.

I stopped, for the grandeur of the  
scene overwhelmed me; but my practi-  
cal brother hurried me on, and soon we  
reached the romantic Half-way House.

As we went toward its wide open  
doors something met us with a rush and  
a whirl, and I was promptly knocked  
down. Two heavy black paws were on  
my shoulders, a big red tongue was  
brushing my hands and face, and Jona-  
than's brown eyes were beaming into  
mine.

I hastily scrambled up; but before a  
remonstrance could be uttered, Jonathan  
took his chances into his own head, for  
he pranced delightedly around us, the  
broken chain hanging at his collar strik-  
ing us at every leap, giving vent to short,  
sharp barks, denoting his joy at being  
with us, his boon companions.

Making the best of a bad bargain, as  
we thought then—ah, how little we  
knew!—we started again on our tramp,  
plunging immediately into a dense un-  
derbrush, but not until we had accepted  
a blanket for Jonathan from friends who  
were camping for a few days in a charm-  
ing little dell close by.

"Theo," I said about two hours later,  
"are we not almost at the summit? It  
is getting very cold."

He gave me a pitying look.  
"Tired so soon? Shall we turn back?"  
"Oh, no!" I hastily answered, dis-  
satisfied to admit that I could not endure  
the climb as well as he did; and I clambered  
onward, though we stopped to strap  
the blanket firmly over Jonathan's  
shaggy back.

The way became, if possible, more  
rugged, the rocks were closer together,

the level stretch of ground became less  
and less. Snow barred our way in huge  
drifts, until at last, utterly worn out, I  
stopped, crying that I could not go an-  
other step. Theo, with all his self-con-  
fidence, turned an anxious, startled face  
upon me, and something in his manner  
suggested that all was not well. This  
filled me with terror, and I cried out ex-  
citedly:

"We are not lost, Theo, dear? Oh,  
surely, we are not lost on this terrible  
mountain?"

Then suddenly, without an instant's  
warning, the sunshine faded, a violent  
dash of rain and hail blew into my face,  
and I stumbled and fell headlong.

Theo was at my side in an instant,  
lifting me to my feet, but I was not  
hurt, and we stumbled onward. The air  
was intensely cold, the rain and hail  
and snow pelted us unmercifully. A terrific  
peal of thunder echoed and re-echoed  
from mountain to mountain, shaking the  
very earth beneath us.

We crouched beside a massive rock  
for shelter. Theo's arms encircled me,  
and Jonathan's warm, shaggy body was  
pressed close to my own. Presently,  
even in the midst of my terror, a de-  
licious warmth overcame me, and I re-  
lapsed into unconsciousness.

I opened my eyes slowly and idly,  
gazing upon the unfamiliar scene before  
me. The bright sunshine streamed into  
the small, uncurtained window; before  
the red-hot stove in the corner lay a dog  
—why, surely it was dear old Jona-  
than! I tried to rise from the couch,  
only to fall weakly back.

A tall, kindly-faced old man came hur-  
riedly toward me as Jonathan rushed  
up.

"Well, little girl," he said, smiling  
down into my face, "it was a close call,  
and if it had not been for God's good-  
ness and this brave dog, I fear you and  
your brother would never have seen  
another sunrise."

Theo came to see me then, and as he  
gathered me in his arms our tears fell  
silently, for we were very dear to one  
another.

Soon we heard the whole story—how  
Jonathan, brave Jonathan, had saved us.  
How he came, almost frozen, to the door  
of the signal station on the summit, in  
the midst of the storm, and by his pro-  
longed howls, his evident desire to be  
followed, told that some one was in  
peril. There they found us, hundreds  
of feet away, cold and still crouched  
close together, Theo's arms and body  
still protecting me. They bore us to  
the station, and after a time brought us  
back to life.

Mother, on being summoned, came  
up in the car. When the story was told  
to her she put her arms around the  
broad neck of Jonathan, the tears  
streaming down her pale cheeks, and  
said:

"I have indeed much to thank you  
for, Jonathan. But for your bravery I  
should have been left childless this  
day."—Waverley Magazine.

## WE CAN DO WITH SO LITTLE.

A little work, a little play  
To keep us going—and so good-day!

A little warmth, a little light  
Of love's bestowing—and so good-night!

A little fun to match the sorrow  
Of each day's growing—and so good-morrow!

A little trust that when we die  
We reap our sowing!—And so good-by!

—George Du Maurier.

## NATURE'S BAROMETERS.

"What kind of a day is it going to  
be?" the boys and girls ask eagerly  
when some holiday fun, some anticipat-  
ed pleasure trip, is dependent upon fine  
weather. Unfortunately, the girls and  
boys do not ask this information of the  
right people. Rain comes, the plea-  
sure seekers get a wetting, the fun is  
spoiled, and there is general discomfort,  
simply because nobody dreamed of con-  
sulting one of Nature's barometers.

It is worth while to know that many  
animals and plants can tell us when a  
storm is approaching. You young people  
who are in the country, watch the horses  
and cattle stretch their necks and sniff  
the air, see the chickens huddle together,  
and hear the cackling of the geese and  
ducks, telling you as plainly as they  
know how that the storm clouds are not  
a long way off. If you are well pro-  
vided with umbrellas, overcoats, and  
mackintoshes, you might go out of  
doors and watch the wild birds. The  
sea-gulls will not venture out to sea.  
They fly inland, or they hover over the  
fields. The swallows and martins, as  
you know, fly very low when a storm  
is coming, skimming the water with  
their wings. The robin hushes his  
cheerful song, and broods in a bush.  
Among other animals, the mole begins  
to dig harder than he does at other  
times, while the wonderful hedgehog,  
says a writer in Chambers's Journal,  
"fortifies his cave against the coming  
storm with an unfeeling provision which  
has earned for this strange little ani-  
mal quite a reputation among weather  
prophets."

Perhaps some of our young people  
know how the sugar-maple tree behaves  
before a storm. Its leaves turn actually  
upside down. The silver maple also  
shows the white lining of its leaf. But  
the common chickweed, which the  
canary loves to feed upon, is a most re-  
liable barometer. Not only does it close  
its flowers firmly in the damp air pre-  
ceding a rain-storm, but it opens again  
if the rain is soon to cease! A barome-  
ter like that ought to be the property of  
every boy and girl during the summer  
vacation. No boating party, mountain  
excursion, or picnic in the woods, need  
be spoiled by an unexpected shower.

In many places in the country you will  
find numbers of pine cones. Hang one  
in your window, and you will learn  
that a pine cone closes its scales in damp  
weather and expands them when the  
air is dry. It is a hygrometer.

Undoubtedly there are more barome-  
ters and hygrometers of which we know  
nothing, but our young people may  
discover them if they will make a habit  
of closely observing the commonest  
things in Nature, and of using the facul-  
ties of reason which God has given them  
in your window, and you will learn  
stand the wonderful laws of plant life  
and the marvellous gift of instinct  
which belongs to the lower animals.—  
Our Animal Friends.

## THE HOME CORNER.

## FREE PATTERN.

By special arrangements with the BAZAR  
GLOVE-FITTING PATTERN CO., we are able  
to supply our readers with the *Basque Glove-Fitting  
Pattern* at a very low cost. It is acknowledged by  
every one that these patterns are the simplest,  
most economical and most reliable patterns pub-  
lished. Full directions accompany each pattern,  
and our readers have been invariably pleased  
with them in the past. The coupon below must  
accompany each order, otherwise the pattern will  
cost the full price.

## MASS. PLOUGHMAN COUPON.

Cut this out, fill in your name, address, num-  
ber and size of pattern desired, and mail it to—

"THE HOME CORNER, MASS. PLOUGHMAN,"  
BOSTON, MASS.

Name.....

Address.....

No. of Pattern.....

Size.....

Enclose ten cents to pay expenses.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

waist has an elaborate and dressy ap-  
pearance, although the construction is  
extremely simple and very effective in  
black and white or other combinations.  
Glove-fitted linings close in centre front  
and support the full fronts and back,  
the pretty pointed revers extending to  
form epaulets over the sleeve puffs. The  
pointed yoke in back and front is of  
satin covered with lace and closes with  
the standing collar at the left shoulder.  
A ruff of silk stands out over the collar,  
and the full fronts are similarly dis-  
posed at the shoulders. The close-  
fitting coat sleeves are covered to match  
yoke, the picturesque puff being gath-  
ered and arranged to stand out fashion-  
ably at the top, and the wrists are finish-  
ed with frills of lace. Velvet and silk,  
satin and mousseline-de-soie or crepe,  
brocade and silk or satin, cashmere and  
silk, black grenadine and lace over  
white satin all make handsome combina-  
tions by the mode. One material only  
can be used and the yoke and revers  
decorated in outline with ribbon, velvet,  
gimp or passementerie. To make the  
waist for a lady in the medium size it  
will require five yards of twenty-two  
inch wide material, and the pattern,  
which is No. 6862, can be had in sizes  
for a 32, 34, 36, 38 and 40-inch bust mea-  
sure. With coupon, ten cents.

The changes in the cut of the skirts  
and sleeves are not so radical as to leave  
all one's wardrobe hopelessly old-fash-  
ioned.

The skirts have just as many gores,  
but are narrower and modified as to  
flare.

The seams in cloth and tailor-made  
gowns are frequently defined by some  
kind of trimming, braid being most  
used for this.

Purple and dark red are much favored  
this fall. Black and red is a combina-  
tion much seen, as well as brown and  
green. Most of the novelties show black  
used in combination with two or more  
colors.

The magpie combination of black and  
white is still popular for millinery. New  
colors used in trimming hats and bon-  
nets are a pinky apricot shade, and a  
rich cyanine, something like a pink  
geranium.

Mirrored velvet is also to be used con-  
siderably in millinery, being very effec-  
tive.

Fur is seen among the trimmings of  
the new winter hats, to correspond with  
the fur trimmings on the winter cos-  
tumes.

Fur boas are shorter this year, espe-  
cially those of astrachan and sable.  
The most fashionable fur for this  
winter's wear will be sable, mink, Sitka  
fox and chinchilla.

Ribbon will be used very largely this  
fall and winter for dress trimmings and  
millinery, and the variety offered is fas-  
cinating.

Velvet ribbon in every shade and  
width is to be had at the stores, and  
will be used a great deal this winter.

A pretty method of using two widths  
of velvet ribbon was seen the other day,  
which could be utilized in freshening up  
a last year's costume. The narrower  
ribbon, a half-inch wide, was used to make  
an interlined yoke, two lengths of the  
velvet being laid the length of the waist,  
beginning at the shoulder seam next the  
collar and ending in a point at the waist  
line. The yoke was then outlined by the  
velvet being laid along the shoulder  
seam, then following the arm seam to  
the line of the bust, passed across the  
bust and up the other side. Two more  
lengths of the velvet were laid parallel  
with the lower part of the yoke, the  
middle one passing under the velvet  
strips running lengthwise of the waist,  
giving a pretty interlaced effect. This  
sets better if the shoulder straps and  
framework are still interlined. The  
broad three and one-half inch velvet  
was used for the collar and belt, the lat-  
ter being finished with a jaunty bow at  
the front. A graceful finish is given the  
yoke by shoulder loops and ends of the  
broad ribbon to tie the ends of the  
velvet being laid along the shoulder  
seam, then following the arm seam to  
the line of the bust, passed across the  
bust and up the other side. Two more  
lengths of the velvet were laid parallel  
with the lower part of the yoke, the  
middle one passing under the velvet  
strips running lengthwise of the waist,  
giving a pretty interlaced effect. This  
sets better if the shoulder straps and  
framework are still interlined. The  
broad three and one-half inch velvet  
was used for the collar and belt, the lat-  
ter being finished with a jaunty bow at  
the front. A graceful finish is given the  
yoke by shoulder loops and ends of the  
broad ribbon to tie the ends of the  
velvet being laid along the shoulder  
seam, then following the arm seam to  
the line of the bust, passed across the  
bust and up the other side. Two more  
lengths of the velvet were laid parallel  
with the lower part of the yoke, the  
middle one passing under the velvet  
strips running lengthwise of the waist,  
giving a pretty interlaced effect. This  
sets better if the shoulder straps and  
framework are still interlined. The  
broad three and one-half inch velvet  
was used for the collar and belt, the lat-  
ter being finished with a jaunty bow at  
the front. A graceful finish is given the  
yoke by shoulder loops and ends of the  
broad ribbon to tie the ends of the  
velvet being laid along the shoulder  
seam, then following the arm seam to  
the line of the bust, passed across the  
bust and up the other side. Two more  
lengths of the velvet were laid parallel  
with the lower part of the yoke, the  
middle one passing under the velvet  
strips running lengthwise of the waist,  
giving a pretty interlaced effect. This  
sets better if the shoulder straps and  
framework are still interlined. The  
broad three and one-half inch velvet  
was used for the collar and belt, the lat-  
ter being finished with a jaunty bow at  
the front. A graceful finish is given the  
yoke by shoulder loops and ends of the  
broad ribbon to tie the ends of the  
velvet being laid along the shoulder  
seam, then following the arm seam to  
the line of the bust, passed across the  
bust and up the other side. Two more  
lengths of the velvet were laid parallel  
with the lower part of the yoke, the  
middle one passing under the velvet  
strips running lengthwise of the waist,  
giving a pretty interlaced effect. This  
sets better if the shoulder straps and  
framework are still interlined. The  
broad three and one-half inch velvet  
was used for the collar and belt, the lat-  
ter being finished with a jaunty bow at  
the front. A graceful finish is given the  
yoke by shoulder loops and ends of the  
broad ribbon to tie the ends of the  
velvet being laid along the shoulder  
seam, then following the arm seam to  
the line of the bust, passed across the  
bust and up the other side. Two more  
lengths of the velvet were laid parallel  
with the lower part of the yoke, the  
middle one passing under the velvet  
strips running lengthwise of the waist,  
giving a pretty interlaced effect. This  
sets better if the shoulder straps and  
framework are still interlined. The  
broad three and one-half inch velvet  
was used for the collar and belt, the lat-  
ter being finished with a jaunty bow at  
the front. A graceful finish is given the  
yoke by shoulder loops and ends of the  
broad ribbon to tie the ends of the  
velvet being laid along the shoulder  
seam, then following the arm seam to  
the line of the bust, passed across the  
bust and up the other side. Two more  
lengths of the velvet were laid parallel  
with the lower part of the yoke, the  
middle one passing under the velvet  
strips running lengthwise of the waist,  
giving a pretty interlaced effect. This  
sets better if the shoulder straps and  
framework are still interlined. The  
broad three and one-half inch velvet  
was used for the collar and belt, the lat-  
ter being finished with a jaunty bow at  
the front. A graceful finish is given the  
yoke by shoulder loops and ends of the  
broad ribbon to tie the ends of the  
velvet being laid along the shoulder  
seam, then following the arm seam to  
the line of the bust, passed across the  
bust and up the other side. Two more  
lengths of the velvet were laid parallel  
with the lower part of the yoke, the  
middle one passing under the velvet  
strips running lengthwise of the waist,  
giving a pretty interlaced effect. This  
sets better if the shoulder straps and  
framework are still interlined. The  
broad three and one-half inch velvet  
was used for the collar and belt, the lat-  
ter being finished with a jaunty bow at  
the front. A graceful finish is given the  
yoke by shoulder loops and ends of the  
broad ribbon to tie the ends of the  
velvet being laid along the shoulder  
seam, then following the arm seam to  
the line of the bust, passed across the  
bust and up the other side. Two more  
lengths of the velvet were laid parallel  
with the lower part of the yoke, the  
middle one passing under the velvet  
strips running lengthwise of the waist,  
giving a pretty interlaced effect. This  
sets better if the shoulder straps and  
framework are still interlined. The  
broad three and one-half inch velvet  
was used for the collar and belt, the lat-  
ter being finished with a jaunty bow at  
the front. A graceful finish is given the  
yoke by shoulder loops and ends of the  
broad ribbon to tie the ends of the  
velvet being laid along the shoulder  
seam, then following the arm seam to  
the line of the bust, passed across the  
bust and up the other side. Two more  
lengths of the velvet were laid parallel  
with the lower part of the yoke, the  
middle one passing under the velvet  
strips running lengthwise of the waist,  
giving a pretty interlaced effect. This  
sets better if the shoulder straps and  
framework are still interlined. The  
broad three and one-half inch velvet  
was used for the collar and belt, the lat-  
ter being finished with a jaunty bow at  
the front. A graceful



## OUR HOMES.

## MATER DOLOROSA.

Because of one small low-laid head all crowded  
With golden hair  
Forevermore all fair young brows to me  
A halo wear;  
I kiss him reverently. Alas! I know  
The pain I bear.

Because of fear but close-shut, holy eyes  
Of heaven's own blue  
All little eyes do fill my own with tears—  
What's their hue;  
And motherly I gaze their innocent  
Clear depths into.

Because of little pallid lips, which once  
Mine did call  
No childish voice in vain appeal upon  
My ears doth fall;  
I count it all my joy their joys to share  
And sorrows snail.

Because of little dimpled hands,  
Which folded lie,  
All little hands henceforth to me do have  
A pleading cry;  
I clasp them as they were small wandering birds  
Lured home to fly.

Because of little death-cold feet, for earth's  
Rough roads unmet,  
I'd journey leagues to save from sin or harm  
Such little feet,  
And count the lowliest service done for them  
So sacred—sweet!

—Mrs. Paull.

## HARD LEARNED LESSONS.

Mrs. Lewis was rolling out pie crust in the hot kitchen, and her husband, although it was the middle of the forenoon, was fidgeting about, looking here and there rather aimlessly at the ceiling.

"Are you hunting for anything special, Stephen?"

"Well, yes; I'd like to find a buckle somewhere for a bit of harness; don't 'pear to be none."

"I should think not, in the button-box or the dish-closet. Look around the barn."

"Perhaps I better. Deacon Baxter come along by a spell ago. He's in a kind of worry."

"What's the matter? Somebody sick?"

"No, oh, no, ain't anybody sick."

Mrs. Lewis was putting her pies in the oven, and her husband watched her silently. Finally she rose up and wiping her heated face, looked at him standing in the door. How queer and uncertain he acted.

Deacon Baxter it is then, if you're ready."

"Well, it seems they've got some misunderstanding about the boarders; about a letter bein' lost, an' thinkin' some wasn't comin' they took others, an' now they've all come, an' two extra ones; an' Deacon says what to do but don't know. He's going to build on a wing 'tween now an' next summer, but that don't help 'em out now, you see."

"Of course not. Why don't they go to Ferris?"

"Ferris is crowded. They've been over to see."

"They can go away to some place else, can't they?"

"They don't want to. Fact is, Deacon come over to see if we didn't want 'em. It's three young men, and they'll be out of the way 'bout all the time—fishin' and shootin', an' they'll pay seven dollars apiece. Think of that, twenty-one dollars a week comin' in; an' most all clear profit, what with the quantities of garden stuff, an' early apples for pies, an' berries an' milk an' eggs. Why, that's all folk's wants."

"I know; but think of the work it is an' the time it takes to pick the vegetables an' berries, an' the extra cookin' an' all."

"Yes, of course, farmer folks have to work more or less, anyhow, an' they might as well work to some purpose, seems to me. But you always was so set against summer boarders, Lucy."

"It's been because I ain't felt equal to doin' for 'em. Someway since the children was took away I haven't had the ambition or strength to drive ahead as I used to; an' it ain't no use, neither, stood out on your buyin' that last land, for it seemed foolish to go on getting a big farm an' no one to take it after us; it seemed we better take the money an' make the house more comfortable, an' not work so hard ourselves; an' now you want to take on more work still, I s'pose you told Deacon Baxter we'd take 'em, didn't you?"

"Well, no; I told him I'd see what you said, an' if he didn't hear nothing to the contrary they might come on this afternoon. If you won't take 'em at no rate I'll just hook up an' go over after dinner and tell 'em."

"Oh, dear, I don't know what to do! I'd like the money, of course. I was thinkin' only this morning how I needed a new carpet, an' wishin' that another window was put into the kitchen an' the water brought in, an' some new steps on the back porch. Can I have these things done if I take the boarders, Stephen?"

"Why, I s'pose so; but we don't want to be foolish and fritter the money away. John Hinman told me he built that addition to his barn last fall with boarder money; they had six nigh two months, an' never hired a day's work on account of 'em; so it amounted to a nice sum, an' give 'em a big lift."

"Didn't John's wife have any of the money after working so hard all summer?"

"Oh, yes; he told me she had three dollars an' got herself a new print dress an' a pair of shoes. Spent it right away for clothes!"

"She ought to have had half the money, at least."

"My goodness, Lucy! that would have been sheer waste. As it was put in the barn, it'll stand to their credit an' good a long time; an' she was agreed to have it so. She's a real helpmeet, John's wife is, a very worthy woman; only, of course, no judgment about spendin' money. Come, we must settle our own affair."

"I know I can't spend time enough to think it over as I ought. I s'pose I can try it an' if I can't possibly stand the work, they'll have to leave, or help be hired."

"Oh, we can't hire them waited on, only three of them; if we had a dozen we might keep a woman an' make it pay. Gracious! how good them pies do smell. You're a wonderful good cook, Lucy. I can't hardly wait for dinner. I'll bring a pail of water 'fore I go."

Left alone, the little woman fairly flew about her work; she had to, for it was nearly eleven o'clock. There were vegetables to put over to cook, butter to work and mould, cottage cheese to make, and the young chickens were piteously for a meal. And as the list of things to do lengthened in her mind, she could not see how with but one pair of hands she was ever to get through them all.

Beside the dinner for her husband and two hired men to get and clear away, there would be the two sleeping rooms to put in ready for the boarders, curtains to pick for supper, another cake to make, and also biscuits, for the bread would not hold out till the morning's baking. And the day was hot.

About five o'clock Deacon Baxter drove up with the three young men with their trunks and wheels. After a pleasant survey of their rooms and a hasty settling of their belongings, they hurried down to enjoy the cooling breeze under the maples in the yard, and their hostess, with nervous, tired hands, mixed the biscuits which an hour later they ate with so much relish. Really they enjoyed and praised the supper so much, that the poor little woman felt repaid for all her toil and forgot how tired she was.

The boarders were as little trouble as boarders could possibly be, being off about the fields, or under the maples where they had strung some hammocks, most of the time; and they were so full of life and life that one could not get a feeling of exhilaration just to hear them, and with their banjo and gay songs they made the old farmhouse seem like a different place entirely.

If the work could have been done to advantage, it would not have been so hard for the poor housewife, but the water had to be brought in a pail, and oh, how much had to be used; the wood sometimes sulked and wouldn't burn, and at other times made a raging furnace of the kitchen. How that longed for window on the north was needed.

Then she had to set the boarders' table in the sitting-room, which made so many extra steps, and she tried to keep the rooms cool and free from flies, and the peas and beans were a long way from the house and the berry bushes still further, so day after day went by with not a moment for absolute rest, and every hour brought new duties. But Stephen was beaming; they were at last keeping summer boarders, and it was scarcely any trouble.

At the end of the first week each one paid Mrs. Lewis the board money. Her husband was not present at the time, and she sat for a little, half dazed at the amount of money in her hand; but at his entrance she promptly handed him ten dollars and fifty cents.

"There's your half of the board."

"Good land! you don't think of dividin' it up all the time like that, I hope!"

"Why, I thought it would be fair for you to have half. If you don't re'lly want it, I'll keep it of course. Shall I, Stephen?"

"No, indeed! I'd much better keep the whole of it till it comes into use. They ought to settle with me. I'm head of the house."

"Has their being here added to your work?"

"No-o, I don't know as it has, to speak of. I brought two pairs of water today."

"And I've brought twenty. No, Stephen, I've made up my mind once for all, that I'll keep half the board money for my own, or I don't work another day. Right is right, and here I've worked year in and year out, and never had a five-dollar note as wage money, nor a present. I'm tired of tolin' for nothing."

"Dear me! Don't you have the same as I do?"

"No; I don't have any money to spend or keep, no more than a pauper."

"I hope you ain't losin' your senses complete, Lucy. You ain't never talked so before. I guess you'd better clear up the table an' git kind of calmed down in your mind."

The summer weeks went by, crowded to the brim with the usual round of work. Mrs. Lewis had kept going. The various things she did between five in the morning and ten at night would have been one even to count. She had adhered to her resolve to divide the income, and her husband took his share with the best grace he might, determined in his own mind to have a voice in the matter when the other part came to be spent. He did not seem to see how thin and pale his wife was looking, pale, only when flushed with the stove heat over which she stood so many hours a day.

He did not even know how little she ate, or that she slept scarcely at all. He and his men were busy gathering the hay and grain; it was turning out well; all in all, it would sum up a very profitable year.

One morning the latter part of August Mr. Lewis saw a man coming down to the field where he was at work.

"Well, you're busy, friend, I see; but I come to ask if you can't spare a few hours tomorrow to do a neighborly act. It's to be a pal bearer to a funeral at the brick church and the burial over to the Plains."

"Why, I s'pose I can; but who's dead?"

"John Hinman's wife. Ain't you heard? Dropped just as she was dishing the dinner; never knew a thing more; died at two o'clock. Stroke, the doctor said, brought on by heat. But then she was worked nigh to death; boarders every summer, hired men, milk to care for, no help. Well, poor soul! she can rest now. Then we depend on you tomorrow? All right; be at the house by one o'clock. Hinman's about crazy moaning for his dear wife; but folks don't feel much sorrow for him. He ought to have thought how dear she was sooner, and saved her a little."

Left to himself, Mr. Lewis did some serious thinking. What if it had been Lucy who had dropped down by her seething stove, helpless forever. Why not she as well as that other? He knew at that moment she was baking bread and pies, and the mercury stood at ninety outside doors; what must it be in the kitchen? His interest in his own work was gone, and he went up to the house, although it was barely eleven o'clock. His wife

paused with a smoking pie in her hand to ask if he felt sick.

"No, not sick; just a little out of sorts; weak like an' shaky; don't want to work."

"It's the heat, Stephen. You better lie down till dinner's ready. I'm hurryin' it on."

"I know you be. I got worryin' about it down in the lot, for fear you'd give out. Need you do so much hot days like this?"

"Why, yes; there's the meals just the same an' all the rest. I can't let up, for it would get ahead of me entirely, the work would."

"Can I help you? Want a pail of water now?"

"No, I just brought some. Things are done enough to take up this very minute, I do believe."

He watched her going so deedly from one thing to another, and hurrying here and there, but he could not tell her just then of her own life, and how it was with her. He did not enjoy the well-cooked dinner as much as usual. After it was over he still lingered about, doing some unaccustomed bits of work, much to his wife's amazement, until he told her about Mrs. Hinman, and then she understood his unworried face and anxiety.

The next day when he returned from the funeral, he brought with him a strong woman of middle age.

"Shut up the table, and get the work off you, Lucy, an' now you see if you can have a little rest, an' recruit up some."

But the reprieve came too late to prevent disaster; and for many weeks thereafter the worn-out little woman lay in her bed in the grasp of a slow fever. The doctor came twice a day, and then every day, and it was well on in October when his visits were no longer needed at the farmhouse.

When the hill came in Mrs. Lewis said she would pay it out of the board money, but Mr. Lewis said it should be paid out of his share, which was speedily done. And Mrs. Lewis still has her half to spend as she pleases.—Selected.

## THE BLEAK OF THE YEAR.

There is a time of subtle browns, and grays that run to silvers, and tremulous greens, russet tints, and ash-blue pools of leaves. Of ghostly mosses and elusive grass. That's neither lush nor dead; of naked trees that stretch vast and neutral, tone on tone, to be called a color, but a touch.

—Richard Burton.

## ENCOURAGING CHILDREN.

The habit among parents of saying discouraging words to their children is too general. The child forms a plan. It naturally goes to the parents for approval and help and is too often met with "Oh, you can't do that! It's of no use trying, or you will surely fail."

The parent does not realize how he is undermining the character the child should form of thorough, persistent effort. It will never be known how many failures in life are due to such mistaken training.

"If I had ever had any encouragement at home, my career in life would have been very different," a bright young man said to me. "I can see now that I had the ability and every necessary qualification for the line of work I wished to follow, but I was discouraged at home until I lost confidence in myself."

I could sympathize with her fully, for in my own home the word "can't" was a household word, checking aspiration until hopeless timidity was the result. The boy in the home needs encouragement as well as the girl. He will have his failures, but, "Try, try again," has helped to form many a rugged, persistent character.

The boy whose hopes and aspirations are forever being checked at home will emerge into manhood timid, irresolute, ever on the lookout for obstacles unless he be of unusual strength of character. I have in mind a young man brought up on a farm. He had a great love for oratory, an ambition to be something besides a tiller of the soil, an occupation most ungenial. His aspirations were the butt of ridicule in his family. They called him "Ciebr" because they had heard him declaiming to the stones and fences as he guided the plow over the fields. Fortunately, he married a woman whose ambition was equal to his own and intelligent enough to see it. She was brave also, and for his sake denied herself every luxury that he might have the opportunity he craved to study law. She has had her reward in seeing him take his place among the leading lawyers of his community and he is now filling with honor the office of judge.

We, as parents, are building the houses of character for our children. Let us live in all their lives. Let us see to it that the foundations are well laid and cemented with love and prayer.—House-keeper.

## New Methods of Gold Mining.

The nature of the revolution indicated will best be understood by contrasting the conditions of gold mining twenty years ago and at the present time. The chief source of the gold supply, up to a very recent day, has been the rich gold-bearing alluvium, which bears the same relation to gold deposits in general as a layer of cream to a pot of milk. It is estimated that from 1848 to 1875 nearly nine-tenths of the world's gold came from this alluvium. Now, in greater part, this rich cream has been removed and at the present time the gold is derived from a third of the supply is derived from this source. In other words, the placer mining has changed places with lode mining, and the greater part of the world's gold can no longer be washed down the hillsides at comparatively slight expense, but has to be sought in the bowels of the earth, often at far depths. More than this, quartz mines of extraordinary richness are by no means so common at the present time as they were two or three or four decades ago. The difficulty of working has steadily increased, while the average value of the ore has steadily declined.

You may judge of the comparative cost of working by a comparison between the two and the former day. The gold bearing beds of the Transvaal are not difficult of access, nor expensive to work. They lie in a curiously regular fashion, resembling coal beds much

more than the general run of gold bearing veins. The total output of these fields was about 35 millions in 1894, and a mining authority, Professor Rickard, has estimated that to gain these 35 millions of gold probably cost as much as all the 143 millions which California and Australia put forth in 1851-1853, taken together. Or, to put the matter in another way, it has been computed that in the bonanza placer days two men with a shovel, a pick and a rocker could gain as much gold as ten men and ten stamps can at the present time.—Review of Reviews.

## IND AN SUMMER.

Again the leaves come fluttering down, slowly, silently, one by one. No more scarlet and crimson and gold and brown, willing to fall, for their work is done.

—Ellen Palmer Allerton.

The mellow year is hastening to its close; the little birds have almost sung their last, their summer notes, and the birds that shrill-piepled barbers of early morn—

—Harley Coteridge

## The Electric Road.

The hum of the trolley is in the air. It is everywhere. It has taken possession of the atmosphere of the country. In the great cities, where other and sharper and more strident noises abound with it, it is less felt than in villages and on country roads. There is scarcely any escape now from its whir and buzz on any of the principal highways. At the dead hour of the night the reader in a secluded country house hears it call to him, dragging him out of his world of poetry, out of his medieval romance, out of his classic studies, dissipating his dream of security and repose, insisting that he should pay attention to the passing of the nineteenth century—nay, more, to the arrival of the twentieth. It bids him arise and gird his loins and go somewhere, anywhere, indeed everywhere, and for nothing comparatively—five cents. The world is in motion, the American world is all in motion—nevermore to rest, to sit still, to reflect, but to go. The trolley calls, and we must go. The main line that runs wears only have peace by putting ourselves in the current, and moving on with the whirling, whizzing world. Who rides so late through the night and wind? It is that new being, the Motorman, O my beloved child! It is the modern Erkong, and his victims he holds them fast and keeps them warm, for his car is heated by electricity. Willy-nilly, we must go with him. He turns on the lightning with a crank, and he speeds away like a spirit. We must go. Whither? It does not much matter. Anywhere so we keep in motion. The Ear-king smiles, the Ear-king grins, the Ear-king frowns. He has his hand on the lever of the universe. The hum that he makes is not exactly the music of the spheres, though it is part of the orchestra, and it will not last long. The machine that runs wears longer than the machine that rusts. That at least is our American theory. I fancy that the very patriotic American Colonel Dame, Mistress Abigail Adams, would have enjoyed the bustle of this present time. A hundred years ago, when detained by a calm on the Atlantic, her first voyage on the hateful sea, she wrote: "I begin to think that a calm is never more than a lull in the storm. Every object is most beautiful in motion; a ship under sail, trees gently agitated with the wind, and a fine woman dancing, are three instances in point. Man was made for action, and for bustle too, I believe. I am quite out of conceit with calms." Let the Motorman, the vicegerent of lightning, turn his crank.—Charles Dudley Warner, in Harper's Magazine.

## Our Country's Real Enemies

In discussing the country's real enemies in the Ladies' Home Journal, General Harrison says:

"The impulse of patriotism needs to be instructed, guided—brought to the wheel—if it is to do the every-day work of a nation. Patriotism is the making of a citizen's duty. A readiness to go to the field? Yes, and equally to the primaries and to the polls. The real enemies of our country—the dangerous ones—are not the armed men nor armored ships of the great powers. If there is too much exuberance in the thought that we can whip the world it is a safe saying that against any part of the world that will ever be in arms against us. We are alert as to foreign foes—the drum taps the heaviest sleepers. But we are a dull people as to internal assaults upon the integrity and purity of public administration. Salvation Army methods seem to be needed in politico-moral reforms. It has seemed to me that a fuller knowledge of our civil institutions and a deeper love of the world would make us more watchful of their purity; that we would think less of the levy necessary to restore stolen public funds, and more of the betrayal and shame of the thing. A good argument might be made for the wave theory as applied to patriotism, for it seems to have its ups and downs. There are eras when it rises to the combining point and others when greed and selfishness rise above it on either hand."

## An Important Discovery.

A large and partially unexplored region north of the Province of Quebec and between the head waters of the Ottawa River and James Bay, the southern part of Hudson Bay, has recently been the scene of a notable discovery by Professor Bell, of the Canada Geological Survey. During his explorations last summer he traced the course of a large river, hitherto unknown, which drains the region to the southeast of James Bay. The river is larger than the Ottawa, and a great part of it averages a mile in width. The country drained by it is level or gently undulating, and may be generally described as a plain of one thousand feet above the sea level along the height of land, diminishing to some four hundred feet at one hundred miles or so from the mouth of the river, and then descending more rapidly to the shore of James Bay. The soil is sandy in the vicinity of the height of land and

for some distance beyond, but of brownish clay along the banks of the rivers and in the forests. The country is well wooded, and is fitted to be the home of a large population.—Review of Reviews.

## For Village Improvement.

John Gilmer Speed writes upon how to organize and conduct a Village Improvement Society in the Ladies' Home Journal. He prefaces his paper with the assertion that the "future prosperity of the country village depends, in a measure, upon its suitability for the summer residence of those who prefer, at that season, to leave the hot and crowded cities." and argues further that "a Village Improvement Society should be a pure democracy, and within its membership it should embrace every man and woman of good repute in the neighborhood, and besides this there should be established an auxiliary league of children. This league should be asked, and urged, and instructed to assist the main society. Such societies are usually supported by fees and dues. The very well in a village where the majority of the people are quite prosperous and usually have a store of ready money at their disposal. But even in such places I prefer the method of supporting the society by purely voluntary subscriptions of money, labor and material. Labor is just as good as money, and is given much more freely by all save those who are rich."

After canvassing the matter Mr. Speed suggests a public meeting, to be addressed by some one familiar with the details of the work, preceding preliminary organization, and the adoption of a constitution. Permanent officers and committees should be named at the first meeting, and preceding the second one the first labor day should be observed. "On that day all the men and teams in the village should congregate to work under the direction of the executive committee, and the ladies of the society should provide a picnic luncheon for the workers of the day. In some untidy villages the whole of the first labor day might be given to cleaning up; in nearly every village it would be a good thing to put the grounds and fences of the public schoolhouse in order. But there are always very obvious needs everywhere before the advent of the village improver. But what is done that day should be done with some thoroughness, and the noonday luncheon is apt to invest the day with some of the characteristics of a festival. What is done will be discussed in every house of the village, and the achievements will inspire confidence or provoke criticism."

## Condensed Poetry.

"Boil it down" is a pretty good newspaper maxim, but even a newspaper maxim needs to be obeyed with discretion.

Charles Metcalf, who has been writing advertisements for a drama in New York City, had an unpleasant experience in connection with a compositor of one of the great dailies of that city. Metcalf wrote a poetical advertisement, as follows:

From half-past eight till half-past ten,  
You laugh and laugh and laugh again.  
Imagine his surprise when a matter-of-fact compositor set up the advertisement and it appeared:

From 8.30 to 10.30,  
You laugh and laugh and laugh again.

—Live Matter.

## GEMS.

All one's life is music if one touches the notes rightly and in time. But there must be no hurry. There's no music in a race, but there's the making of music in it; and people are always missing that part of the life-melody and scrambling on without counting.—Ruskin.

Every man has some peculiar train of thought which he falls back upon when he is alone. This, to a great degree, moulds the man.—Dugald Stewart.

I cannot praise a fugitive and cloistered virtue, unexercised and unbreathed, that never sallies out and sees her adversary, but sinks out of the race, when that immortal garland is to be run for, not without dust and heat.

—John Milton.

Every man's business, whatever it be, becomes a liars' education to him just as soon and just as far as he lives not in its methods but in its principles.—Phillips Brooks.

## The Fountain of Youth.

We all remember the story of Ponce de Leon seeking the fountain of youth, and we all sympathize with him in his quest. Youth means so much. It means more than life, more than health and vigor, more than the sparkling eyes—we all covet genuine youth.

The weak and feeble are those who are before time, is not the result of accumulated years; it is the effect of wrong living and unhealthy blood. When the blood is pure and fresh the body will be fit for good youth.

Thousands of people who seemed to have lost their youth by disease and suffering found it again through the use of Dr. Pierce's Golden Medical Discovery, the most perfectly natural and scientific rejuvenator of the physical forces ever known to medicine.

It gives the blood-making organs power to make new blood, full of the life-giving corpuscles which drive out disease, build up fresh tissue, solid muscular flesh and healthy nerve force. It gives constitutional power, deep and full and strong; rounds out hollow cheeks and emaciated forms; gives plumpness, color and animation.

It does not make dainty fat, but drives out liver oil. On this account, it is a perfect tonic for corpulent people.

It aids digestion and the natural action of the liver, and by feeding the nerves with highly vitalized blood banishes nervousness, neuritis and insomnia.

Where a constipated condition exists, the "Discovery" should be used in conjunction with Dr. Pierce's Pleasant Pellets, which are the most perfect, mild and natural laxative in the world. There is nothing else "just as good." There is nothing that will do the work so thoroughly, surely and comfortably.

## To find the time

required to clean your house with Pearline, take the time required to clean it last with soap, and divide by two. Use Pearline, and save half your time and half your labor—then you can find time to do something else besides work.

Pearline will clean your carpets without taking them up.

It will clean everything.

From the kitchen floor to the daintiest bric-a-brac, there's nothing in sight that isn't cleaned best with Pearline. It saves rubbing.

Millions NOW USE Pearline

FAIRLY FOR SALE



best with Pearline. It saves rubbing.

Millions NOW USE Pearline

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE

FAIRLY FOR SALE



**ROYAL BAKING POWDER**  
Absolutely Pure.

A cream of tartar baking powder. Highest of all in leavening strength.—Latest United States Government Food Report.

ROYAL BAKING POWDER CO., NEW YORK.

## THE HORSE.



**S. ANDREWS DRIVER**  
The illustration depicts Driver Andrews, the man under whose guidance the Champion Pacer, John R. Gentry, made the phenomenal speed of a mile in 2.00, at Rigby Park.

—Messenger Wilkes, 2:23, illustrated on the first page, is a splendid example of the due combination of speed and style and stamina—three fundamental requisites of a gentleman's horse. To obtain a good rate of speed, it is no longer necessary to buy an inferior-looking, short-winded rabbit of a horse, useless outside of the race track. Horses of many different types are now bred to show speed, and it is possible to spin along at a handsome pace behind a horse which, like Messenger Wilkes, is also remarkable for beauty, style, endurance and superior action.

Messenger Wilkes, 2:23, is the property of Messrs. B. F. and F. H. Briggs, Auburn, Maine.

## AN AUSTRALIAN CHAMPION.

Last May the Australian public was startled to observe a trotter of American descent emerge from the "back blocks," in an international free-for-all, lower the Australian record three consecutive times, and wind up with a mark of 2:14 1/2. This mile was trotted over a track that is ostensibly a grass one, but for the most part the grass was burned off it and the weeds had grown up on it in places some four to six inches high. The hills and dales are quite pronounced in it, and altogether no sensible, or even sane, American trainer would ever have thought of driving a trotter at a 2:14 clip over such a cow path. In addition to this horse, by name Fritz, humped his owner, his saddle and small kit twenty-eight miles from the "station" to the railway, spent thirty-six hours in a box car, traveling between 600 and 700 miles to the meeting, had only two days' rest and then went on and won as was described. This marvelous performance induced that trotter's owner to offer to match him for \$10,000 a side against any American trotter or pacer, bar none, for a race of heats to be brought off in Australia this coming season (their summer being our winter, of course), and to allow the acceptor of this challenge \$750 for expenses in case of defeat. To take up this challenge necessitates the posting of \$10,000, the making of a journey of 12,000 miles and the incurring of a vast amount of expense in reaching Sydney. Consequently no one took it up until a few days ago when banker Lewis G. Tewksbury, owner of Robert J., 2:01 1/2; Mascot, 2:04; Paul, 2:07 1/4, and other fast ones, picked up the gauntlet, and if his terms are satisfactory will ship his horse from New York Dec. 1, going by way of San Francisco, stopping off a day or two in Honolulu and continuing to Sydney. Our esteemed contemporary, the Horseman, has been named as the stakeholder. Of course there is many a slip betwixt the cup and the lip, but as we are credibly informed, the Australian party means business—that is, private letters so indicate—it really begins to look as though we would in the end have an international trotting race worthy the name. Fritz, the champion antipodean trotter, was sired by Vanelev, an American stallion, bred at Woodburn and exported several years ago. Vanelev was by Harold out of Vaasor by Belmont and consequently carries much of the blood that is winning with us to-day. Fritz' dam is by Berlin, a horse of Thoroughbred extraction and beyond that nothing. Fritz is a rangy, good-gaited, big, upstanding, powerful trotter, that goes in quarter boots and elbow boots forward and shin boots behind, wears a light shoe all around, wears a two-minute harness and pulls an American-built sulky.—American Horseman.

Do you love a horse? If so, take good care of him by giving the animal a good bed of German Pest Moss. Send to C. B. BARNETT, importer, Boston, for descriptive circular.

## THE GRANGE.

## Stoughton Grange.

Was in charge of the "married sisters," Monday evening, from the opening to the closing. They transacted the business of the order with despatch, gave one of the most original and unique entertainments of the season, finishing their labors with a capital supper for the large number present. The entertainment consisted of music by the "Fadette band," which was liberally applauded; quotations; excellent vocal solos, duets, and choruses; readings; a humorous sketch of "Grandmother Pimpkins," and the realistic wedding ceremony following; and a grand march by about thirty of the entertainers, the costumes of "ye olden time" figuring largely and very becomingly in this number. In behalf of the ladies of the Grange sewing circle, some very handsome crockery was presented Stoughton grange by Mrs. S. S. Goldsmith. A cordial vote of thanks from Mr. and Mrs. W. B. Holmes for the courtesies of the recent reception to them was received. State Lecturer Stockwell will address the next meeting, October 26.

## A Bear that Went Trouting.

J. G. Rich tells in Gameland how a bear that he came upon suddenly was fishing. He was going through a swamp when he saw a bear stretched out on a log over a brook. While the man was watching it the bear put a paw down through a hole in the shell of the log on which it lay and dipped it into the water. The trout gathered around it and nibbled at the hard, rough ball of its foot. Then the claws shut up quickly and the fish were caught. That the bear had been very successful was shown by the piles of fish heads and a well-worn path leading to the log. Mr. Rich set a trap in the path and got the bear.

Cats that fish go about it differently. The cat sets no bait, but lies on a plank or log over the water in exactly the same way that it would watch the hole of a mouse. When at last a fish comes close enough, instead of springing the cat reaches out its paw and grips the fish. There have been instances where dogs have become expert fishers, but not having good claws for gripping, like fish hawks, cats and bears, they have to depend on their jaws. On the approach of a fish the dog would lay its ears back slowly, so as not to alarm the fish, then when the fish was near enough it would plunge at it with wide open mouth.

## Saving Choked Cattle.

"I have never known" my method of relieving choked cattle," says a writer in an English farm paper, "to fail in giving instant relief. I cut a stick about four feet long and one-half inch thick at the large end, with prongs like fork-tines about one inch long at the small end. The stick wants to be straight and smooth. I generally cut a small gray birch. Then wind the prongs with yarn until well covered, and sew over and through this a piece of cotton cloth, making a ball some inches in diameter, securely fastened to the small end of the stick.

"Grease the ball well with lard, insert in the animal's throat, and push it down the length of the stick if need be, or until the substance is forced into the stomach. Then withdraw the stick and the creature will be relieved. I have been called in the night to go four miles to relieve an animal that had been choked for hours. I relieved her in two minutes after the stick was ready, so that she commenced eating immediately. Two or three men had tried every way they knew for hours without success. The creature was choked with a potato."

## Proverbs of Assam.

Here are some rather clever proverbs of Assam: "The best crops grow on others' fields, but the best sons are at home." "A bird is a little thing, but it builds its nest on a lofty halting tree." "Bay land which slopes to the middle, and marry a girl who has a good mother." "The biggest jack fruit always hides under the leaves." "If a man slips down, it is always his eldest wife's fault, but if his youngest wife makes a mistake he says he will see about it." "A hasty cook, a hasty broom, and the husband goes fasting; a slow cook, a slow broom, and the husband eats three meals a day."

## The Horse's Hat.

The horse's hat, which last year a humane horse owner in Bordeaux provided for his horses, is now becoming a great article of trade in France. It is made of straw and covers the eyes and forehead of the horse, while openings are left for the ears. A sponge is kept inside of the hat and this is moistened from time to time with vinegar, so as to keep the horse's head refreshingly cool.

Tickets for the Fitchburg R. R. popular Hoosac Tunnel excursion of October 17th are good returning on any regular train Sunday or Monday, October 18th or 19th, as well as on the special which leaves North Adams at 4:30 p.m.

—The Brazilian Chamber of Deputies has refused to discuss the bill providing for a six months' moratorium which was presented in view of the strained financial condition in Brazil.

## Feeding Sheep Under Difficulties.

Anent sheep jumping hedges, I may venture here to tell a tale of a certain old rogue who went by the name of Tup-Harry. This is how he got his nickname. Harry was a small farmer, and he had a neighbor with better means and a better farm than his own. One very dry season Harry had come to the end of his grass for a flock of sheep he possessed. His neighbor had, however, got a fine field of mangel wurtzel. Harry looked over the hedge—a hedge furnished with outstanding staves—and greatly longed for those mangels for his sheep, but he did not relish the risk of being caught taking them. So he went in the evening into his field that was bare of grass, put his head against the hedge, bent his back and called: "Tup! Tup! Tup!" whereupon up ran his old ram, jumped on his back, went on to the hedge, and over into the mangel field, and all the flock in Indian file scampered after him over the back of Harry.

Very early in the morning the rogue went into the devastated mangel field, put his head against the hedge, bent his back, called "Tup! Tup! Tup!" and up came the ram, ran over his back and on to the hedge, and returned to the barren quarter again, followed in Indian file by all the flock. That was done several times and no sign appeared anywhere of the hedge being broken through or of the padlock gate being opened. At last the farmer who was being robbed hid himself one night and saw the whole proceeding. Tup-Harry did not try that trick on again.—Chambers' Journal.

## The Result of a Moose Call.

The battle which is necessary in capturing a bull Moose is an experience of the liveliest and most exciting kind, and a trip to the wilds of Maine and Canada is an expedition looked forward to with great joy by the sportsman.

The following from "Outing" of recent date relates the experience of two sportsmen who were seeking adventures with His Majesty, King Moose:

We were fortunate in securing for this trip a well-known guide, and who as a caller of Moose had no equal.

All the Indian callers have insisted on calling only after sundown, but our guide called only in the hours of daylight, when the game may be clearly seen.

After several attempts, one beautiful, still, frosty morning, we paddled across the lake to the western shore and climbed to a point on the mountain which offered a favorable site for calling up a Moose.

The guide gave the Moose call with all his usual artistic variations, and then—well, a great many things happened. There was a low, deep, muffled sound, which might have risen from the ground at our feet, but which, on the whole, seemed to emerge from the thick belt of barren firs that lined the opposite shore of the lake; then a quick succession of basso-profundo grunts, followed by a terrific crashing of horns against the trunks and limbs of trees. We dashed down the bank in order to connect with the bull Moose express. We got there in time to board the train. The cowcatcher and headlights loomed up, pushing their way through the alders across the lake about one hundred yards away. It was the king of the valley and no mistake. His ears were thrown forward, his horns shone like a crown of glory in the pale October sun, and every hair on his big, black mane stood up as straight as the sentinel firs from which he had emerged.

"Give it to him!" The bullet struck the moose near the right shoulder, for as he turned and charged through the hardwoods we could see that his right foreleg was powerless. Still, he was making regular schedule time, and though we kept heaving chunks of sudden death across the pond at a lively rate, it really seemed, when the moose disappeared in the woods, as though this was not our moose after all. We went tearing through the scrub and came suddenly upon a huge, black animal, with his hair turned the wrong way, sick unto death, but kindly still in his majestic mien, facing us not twenty feet away. A crash from the rifle, and then came the war-dance and the shouting.

The noble animal measured nearly seven feet in height at the shoulder; the horns were just four feet from tip to tip. This is an experience of common occurrence as is chronicled at regular intervals. The Boston & Maine System and its connecting lines so cover the hunting regions of Maine that with very little effort one may visit this wonderful region and participate in this sport of sports. Information and time tables may be had at ticket office and at Boston City Ticket Office, 322 Washington Street.

## German War Dogs.

A special feature in this year's German grand maneuvers will be supplied by war dogs, which have been most admirably trained for seeking the wounded and carrying dispatches. At the command "seek," accompanied by a gesture indicating the direction in which the dogs are to search, they will start off without allowing themselves to be disturbed by any surrounding circumstances. They will find the men who figure as wounded with unfailing certainty, take a piece of their clothing—cap, helmet or a piece of cloth torn off—and bring this back to the ambulance men, whom they then conduct to the spot. In the dispatch service the dogs fulfill their duty with admirable speed and certainty. They carry the dispatches in a small box affixed to their collar.—La France Militaire.

## Palmation of the Heart.

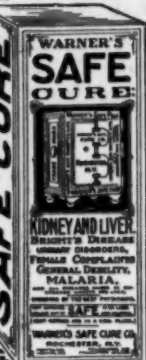
WINTHROP HIGHLANDS, MASS., Sept. 27, '96 I had a touch of the grip one winter and it left me in a bad condition. I had palmation of the heart and a sinking feeling at my stomach. I took a bottle of Hood's Sarsaparilla and it entirely cured me. Since then I have taken Hood's Sarsaparilla with benefit for other troubles.

MISS ETTA F. MORRELL, CHM Ave.

HOOD'S PILLS cure all liver ills.

## Warner's Safe Cure

IN LARGE OR SMALL BOTTLES.



Owing to the many requests from its patrons, Warner's Safe Cure Co. have put on the market a smaller size bottle of Safe Cure which can now be obtained at all druggists at half the price of the large bottle.

is not only a scientific vegetable preparation and does all that is claimed for it, but it is the only Kidney and Liver medicine used by the best people of four continents. A medicine that bears the stamp of the world's approval, and maintains its position for a fifth of a century, must necessarily possess peculiar merit.

## Silo Suggestions.

BRIEF HINTS ON GROWING, PACKING AND FEEDING WINTER OR SUMMER ENSILAGE.

An important advantage in favor of growing sweet corn for fodder and for ensilage is the possibility of selling a good proportion of the ears for table use. It is practically no better for the silo than common field corn; unless pretty well ripened, it makes a rather acid ensilage.

The ensilage will have become settled and have reached its stationary stage within two weeks after filling. The silo may then be opened and feeding may begin.

In packing whole corn stalks into the silo the butts should be laid at the corners. If the butts mold, but little valuable feeding material will be lost. Keep the edges of the silo about two feet higher than the middle, when packing.

It hardly pays to ensilage anything but the corn plant. The air contained in the hollow stalks of most fodder plants makes them hard to keep sweet in a silo.

No need to hurry in filling the silo unless the machinery is hired by the day. If the ensilage stands and settles a day or two during the process, no harm will be done.

If it is decided to ensilage oats or other grains with hollow stalk, the hollows should be filled by pouring plenty of water into the silo.

After opening the silo it is best to begin feeding gradually. A pound or so is enough for the first feed, working up gradually to not over thirty pounds.

The summer silo is a great help on dairy farms when the pasture becomes scanty. It should be a separate structure or a part of the winter silo separated with a partition. It should be filled with fodder corn and left unopened until the next summer.

## Losses in Liquid Manure.

An English chemist points out the fact that in every ten gallons of urine there will be found as much nitrogen as is contained in seven pounds of nitrate of soda, thirty-four pounds of bone meal, or 712 pounds of white turnips. This puts, in a comprehensive way, the loss that occurs when liquid manure is permitted to drain or soak away.

Where cattle alone are kept, and are supplied with but little bedding, there is a considerable loss of liquid manure. Even where there is a barn cellar, many dollars' worth of the liquid will drain out and soak into the ground. But when horse manure, mixed with bedding, is thrown upon the same heap, most of the liquid is absorbed. When the heap becomes large and fermentation takes place, a great deal of water goes off in vapor, and the heap becomes capable of absorbing fresh amounts of liquid. In barns where one well-bedded horse is kept for each six cows, and a manure mixed together in a cellar, there will not usually be any great loss of valuable material. After cleaning out the cellar in the spring, however, the cellar floor should be thickly covered with loam to prevent waste before the new heap grows large enough to ferment.

## Stung to Death.

While plowing the field in the parish of Tierce, near Angers, a laborer named Gilbert had the misfortune to overturn a wasps' nest. The unfortunate the swarm rose and settled on Gilbert, whose head, neck and arms were covered with the pestilent insects. The man's wife, who was working by his side, was also badly stung, and was rendered quite incapable of going to her husband's assistance. When the wasps were finally driven off it was ascertained that the peasant had ceased to live, and it is thought that one of the swarm must have entered his mouth and stung him, so that he died from suffocation.—London Telegraph.

## The United States cruiser Minneapolis

has arrived at Smyrna.

## AGRICULTURAL FAIRS

FOR 1896.

MASSACHUSETTS.

Hillside, Cummington.....	Oct. 29, 30
Hingham, Hingham.....	" 29, 30
Hoosac Valley, North Adams.....	" 29, 30
Amesbury and Salisbury, Amesbury.....	" 29, 30
Blackstone Valley, Uxbridge.....	" 29, 30
Martha's Vineyard, West Tisbury.....	" 29, 30
Middlesex North, Lowell.....	" 17, 18
Oxford, Oxford.....	" 22, 23
Plymouth, Bridgewater.....	" 16, 18
Union, Blandford.....	" 16, 18
Westboro, Mass.....	" 24
Weymouth, South Weymouth.....	" 24, 26
Worcester East, Lancaster.....	" 17, 18
Worcester North, Fitchburg.....	" 22, 23

NEW YORK.

American Institute, New York.....	Sept. 28, Oct. 29
American Live Stock, New York.....	Nov. 1, 2

OTHER STATES.

Canada Central, Ottawa.....	Oct. 17, 26
Delaware, Dover.....	" 22, 26
South Carolina, Columbia.....	Nov. 9, 13
Tennessee, Nashville.....	May 1, Oct. 31
Texas, Dallas.....	Oct. 10, 25

## THE WORLD OVER.

—The Canadian telegraphers' railway strike in the Dominion has been adjusted.

—The Nicaraguan Congress has ratified the treaty with Germany, which had been pending since last January.

—Sir Julian Pauncefote, the British Ambassador to the United States, will sail from London on October 21.

—Emperor William is to visit the Krupp Works to inspect an invention of great importance for improving the power and durability of guns.

—A large public mass-meeting has been held at Cape Town, South Africa, to protest against the imposition of duties upon articles of food.

Sir William Harcourt explicitly denies the rumor of his resignation of the leadership of the Liberal party in the House of Commons.

—The suit of the Hawaiian exiles, claiming \$50,000 damages each, has been postponed in the Supreme Court at Vancouver, B. C., until January 5.

—A satisfactory conference has been held in England by Salisbury, Chamberlain and Pauncefote regarding an arbitration treaty with the United States.

—Prince Louis, of Savoy, a nephew of King Humbert of Italy, has arrived at Baltimore, Md., while making a tour of the world on an Italian man-of-war.

—Canadian emigrants who recently arrived at Sao Paulo, Brazil, are receiving better treatment at the hands of the Government than was the case on their arrival.

—The entire population of Crete is still under arms, and their leaders have announced that they will renew hostilities unless the Turkish garrisons are withdrawn.

—The Government of Brazil has appointed a special commission to consider measures of financial relief, in order to avert threatened bankruptcy in that country.

—Dr. Rizal, who arrived at Barcelona from Manila, and who was lodged in prison on the charge of having been the promoter of the rebellion in the Philippine Islands, will be returned to Manila at the request of the Military Judge there.

—M. Jean Barthelemy, who was French minister of public works in the Dupuy cabinet, has sent a challenge to fight a duel to M. Cornudet, the writer of an article published in La Lanterne, in which M. Barthelemy was accused of corrupt practices in connection with the railways when he was minister.

—The Russian Minister at Seoul has been instructed to inform the King of Korea that Russia has no idea of concluding a treaty with Japan for a joint protectorate of his kingdom; that Russia considers Korea as an appendage of Siberia, and that the Korean question is closed.

—The czar, previous to leaving Balmoral Castle, gave \$5000 for distribution among the servants, and left a picking case full of expensive jewelry to be presented to all above the rank of servants. All officers of police received a souvenir. He also distributed a similar amount in the same way in Paris.

## Respect the Stomach.

Few people do have proper respect for the stomach. If a thing "tastes good" and is not so hot or so cold as to be painful to the mouth or throat, it is swallowed by too many people regardless of consequences. Do not give the stomach food that will irritate it or retard it in the performance of its natural functions, or it will retaliate in a way that is decidedly unpleasant. A headache, a "lump" or "heavy feeling" in the stomach, and irritations of the digestion resulting from unwholesome food.

Alum baking powders are responsible for the larger part of this unwholesome food, for it is a fact well recognized by physicians that alum renders food indigestible and unwholesome. The danger to health from this cause is so imminent that it behooves every one to adopt precautionary measures to keep alum baking powders, which are now so numerous, from the kitchen stores. It will be found that those powders sold at a lower price than Royal are almost invariably made from alum, and therefore of inferior quality and dangerous to health.

The safer way is to look for the well-known red-and-yellow label of the Royal Baking Powder. That is certain to cover a powder free from alum. The Royal is made of cream of tartar, a pure, wholesome fruit acid derived from grapes. It is renowned for adding anti-dyspeptic qualities to the food, as well as for making finer and better food.

The Fitchburg R. R. announces their last popular Hoosac Tunnel excursion for Saturday, October 17. The rate is only \$2.00.

**TANKS, STOCK, STORAGE and TOWER**  
MADE OF BEST LUMBER,  
WELL SEASONED AND FREE FROM KNOTS.

WRITE FOR CIRCULAR GIVING SIZES and PRICES

**ROSS BROTHERS,**  
102 FRONT ST., WORCESTER, MASS.

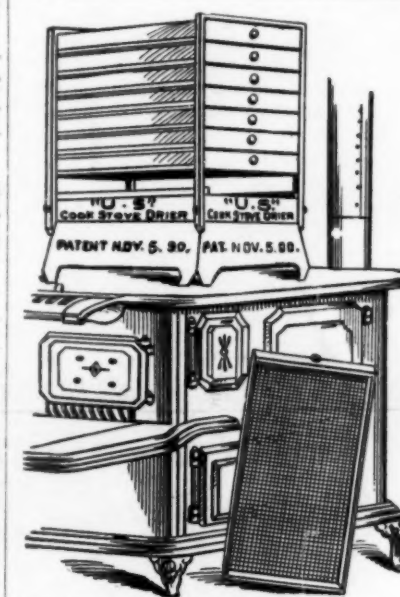
## The Most Important American Book on Live Stock.

SECOND EDITION,  
Revised and Enlarged.

## Horses, Cattle, Sheep and Swine.

By GEO. W. CURTIS, M. S. A.,  
Director Texas A. & M. Station and Professor of Agriculture in the Agricultural and Mechanical College of Texas.

Special Offer to Mass. Ploughman Subscribers:  
**The Mass. Ploughman One Year and this Book**  
FOR \$3.50, IN ADVANCE.



THIS SHOWS THE DRIER SET ON AN ORDINARY COOK STOVE.

Any one sending us five NEW SUBSCRIBERS and \$10.00 will receive free one of these Evaporators. Address Mass. Ploughman, Boston.

## BITS OF FUN.

In searching for fall garments housekeepers are beginning to find fans and summer clothing that they couldn't find in the spring.—Acheson Globe.

Smith: I read of so many cases of people being buried alive. Is there no remedy for it? Jones: The only remedy I know of is for the legislature to pass a law compelling doctors to finish their work properly.—Texas Sifter.

A health officer recently received the following note from one of the residents of his district:—"Dear Sir, I beg to tell you that my child, aged eight months, is suffering from measles as required by Act of Parliament."

—It was the first time the little girl from the country had ever seen anybody in bloomers. She put her fingers before her eyes and said, in a horror-struck voice: "I'm afraid God'll think I know that woman!"—Cincinnati Enquirer.

City lady, who is lodging for the summer at a farm house: I like the rooms very much, Mrs. Giles, but there is a rather unpleasant smell pervading them. I suppose it is the drains? Mrs. Giles: No ma'am, it can't be the drains, 'cos there ain't any!

Gilhooley: Have you seen Colonel Yenger since he got back from Washington. Hostetter McGinnis: No, I've not seen him. Gilhooley: Well, he's the maddest man in Texas. Hostetter McGinnis: What is the matter with him? Gilhooley: When he was in Washington he attended the dead letter sale and bought in his own application to the President for a consulship.—Texas Sifter.

"Can you tell me what sort of weather we may expect next month?" wrote an American farmer to the editor of his local paper, and the editor replied as follows:—"It is my belief that the weather next month will be very like your subscription bill." The farmer wondered for an hour what the editor was driving at, when he happened to think of the word "unsettled." He sent a post-office order.

A story is told of the well-known Irish priest, Father Maguire. A farmer, it seems, once asked his Reverence what a miracle was. "Well," replied Father Maguire, "walk on before me and I'll see what I can do for you." The farmer complied, and as he did so the priest gave him a well-aimed kick that made him howl with pain. "Did you feel that?" inquired his Reverence. "Be-gorrah, I felt it sure enough." "Well," Father Maguire replied, "it would be a miracle if you didn't."

Nearly 100 full-page engravings, after sketches from life by the best artists, representing nearly every breed of horses, cattle, sheep and swine.

Already Adopted as a Standard Text Book on Domestic Animals in 18 of the Leading Agricultural Colleges of the United States.

Origin, History, Improvement, Description, Characteristics, Merits, Objections, Feeding, etc., of each of the principal breeds of horses, cattle, sheep and swine, with full details of the best methods of breeding, raising and feeding.

THE SECOND EDITION has been carefully prepared by the author, the text thoroughly revised, brought up to date, numerous additions made, and many valuable suggestions from competent stockmen and breeders incorporated. The chapter on "Selection of the Horse for Speed" is now especially complete, the author having embodied therein a carefully prepared "study in Animal Physics," regarding which the Galveston (Tex.) Daily News says:

"This is a careful scientific consideration of the mechanical construction of the modern trotting horse. It is illustrated with striking drawings of the fore and hind legs of a horse, which are accompanied by carefully compiled tables of the various parts. This is a valuable paper for horse owners."

All the new breeds established, or brought before the public since the first edition was published, have been given proper place, and important facts regarding them, and many old breeds incorporated.

Engravings with explanatory text have been especially prepared to serve in place of a dictionary of technical terms in describing any of the four different male divisions of domestic animals. In fact, it is believed that nothing has been left undone which would tend to increase the usefulness of the new edition, or render it of greater value to the student of a real husbandry, whether in the classroom or on the farm.

Price, in handsome cloth binding, \$2; half leather, \$2.75; half morocco, \$3.50.

Professors of Agriculture in the Agricultural and Mechanical College of Texas.

Director Texas A. & M. Station and Professor of Agriculture in the Agricultural and Mechanical College of Texas.

Price, in handsome cloth binding, \$2; half leather, \$2.75; half morocco, \$3.50.

Professors of Agriculture in the Agricultural and Mechanical College of Texas.

Director Texas A. & M. Station and Professor of Agriculture in the Agricultural and Mechanical College of Texas.

Price, in handsome cloth binding, \$2; half leather, \$2.75; half morocco, \$3.50.

Professors of Agriculture in the Agricultural and Mechanical College of Texas.

Director Texas A. & M. Station and Professor of Agriculture in the Agricultural and Mechanical College of Texas.

Price, in handsome cloth binding, \$2; half leather, \$2.75; half morocco, \$3.50.

Professors of Agriculture in the Agricultural and Mechanical College of Texas.

Director Texas A. & M. Station and Professor of Agriculture in the Agricultural and Mechanical College of Texas.

Price, in handsome cloth binding, \$2; half leather, \$2.75; half morocco, \$3.50.

Professors of Agriculture in the Agricultural and Mechanical College of Texas.

Director Texas A. & M. Station and Professor of Agriculture in the Agricultural and Mechanical College of Texas.

Price, in handsome cloth binding, \$2; half leather, \$2.75; half morocco, \$3.50.

Professors of Agriculture in the Agricultural and Mechanical College of Texas.

Director Texas A. & M. Station and Professor of Agriculture in the Agricultural and Mechanical College of Texas.

Price, in handsome cloth binding, \$2; half leather, \$2.75; half morocco, \$3.50.